

From The Staff:

WTFDA Headquarters, P.O. Box 97, Calumet City, IL 60409

TRAGIC NEWS...VHF DX enthusiasts all over the world have lost a good friend. Mel Wilson, a longtime WTFDAer and avid VHF amateur radio operator (W2BOG) in Pittsford, NY passed away in early February. He was one of the world's leading experts on sporadic E-skip (Es) and auroral propagation. Many WTFDA members will remember Mel's articles on Es for the amateur radio publication QST, as well as some contributions to the VUD--and his presentation at the 1973 Dunkirk WTFDA convention. We'll all miss Mel very much.

WE BLEW IT...Our apologies for the late February issue. Personal problems kept us from getting the address labels typed on time. Thankfully, those problems are past. Kudos go out to publisher Pete Oprisko for his work on the January. He braved a region ice storm to deliver the VUDs to Mike Hogan as soon as they were printed.

IS IT WRITE?...Please, when submitting new addresses, be sure to write legibly. In fact, printing clearly would not be a bad idea. Until recently, we were sending VUDs to one member at the wrong street address because we couldn't read what was sent. Sadly, this is a common problem. So, make it easy on us by sending address changes as soon as you know what your new address will be. Also, if you don't receive a month's issue by the end of the month, write HQ...believe it or not, we make mistakes, too, and a name may be left off the mailing list, etc. We welcome your comments, and assistance, in bringing you earlier VUDs. Remember, we're all unpaid part-time volunteers, and help is always needed by club HQ.

NEW NRC DOMESTIC LOG AVAILABLE...The new, 6th edition of the NRC Domestic Log is hot off the press. It's available for \$8.50 to NRC members and \$9.50 to nonmembers. Send your check to NRC Publications Center, P.O. Box 164, Manassas, VA 22040. It's a superb work, and a must for any BCB DXer (and a good reference for FM DXers).

RADIO WEST REORGANIZING...Word has it that Radio West, which has had financial problems of late, is reorganizing, and should be back on its feet soon. Knowing Grant Manning, it won't be long till it is. If you've written to RW (a book and equipment supplier specializing in the DX hobby) lately without getting an answer, write again.

TABLE OF CONTENTS

MAILBOX: Lots of FM pirate stations active.....	3
MEMOR SCATTER INSIGHTS: A new VUD column for MS DXers!...	5
PCC FM NEWS: KMB on in Alaska--a real mystery station....	6
PCC TV NEWS: WOR-9 and WNAC-7 fighting to stay licensed...	8
QSL CORNER: Two neat TV DX veries from Newfoundland.....	14
SOUTHERN FM DX: Just a bit of February tropo.....	16
NORTHERN FM DX: A few days of good tropo.....	18
EASTERN TV DX: Lots of January Es seen in New Jersey.....	20
WESTERN TV DX: Fascinating report from way out west.....	22
VHF UTILITY DX: P2 skip DX via Latin American repeater....	24
TECHNICAL TOPICS: Auroral hash can be a real mess.....	27
UNITED STATES DOMESTIC RADIO NETWORKING: Satellite feeds...	28



MAILBOX

John Zondlo
1308 SW 74th, Apt. 421
Oklahoma City, OK 73159
(405) 681-5991
Deadline: 5th

New Members:

Arnold Bodner
Lawrence Boyd

147 Turrell Ave.
SR 115

S. Orange, NJ 07079
Gloucester Point, VA
23062

David Carrier
William Stankevitz
Francis Tafelski

Route 1
4835 N. Meade Ave.
c/o Antenna Specialists
306 6th Ave.

Lancaster, KY 40444
Chicago, IL 60630
Wilmington, DE 19805

Renewals:

John Buehler, John Clemmer, Tom Cornell, Clinton Day, Bill Draeb, Ronald Green, William Hepburn, Glenn Jacobs, Greg Kelley, Harold Lane, David Legler, Michael McNeely, David Nieman, Joseph Smith, Jr., Richard Steinberger, Robert Stonier, John Sulak, Verrell Tallet.

Rejoins:

William Eckberg-RR #2-Walnut, IL 61376
Steve West-432 Kenmore Road-Havertown, PA 19083

Address Change:

Rod O'Connor-c/o USCGC Mallow-WLE 396-FPO San Francisco, CA 96672

Renewals Due in May:

Murray Bernstein, Bill Coleman, Jim Gill, Robert Goodman, Joe Gragg, John Griffiths, Phillip Hanger, Jim Jennings, Paul Kalisz, Neil Kazaross, James Kingsbury, John Kosinski, Jr., David Llewellyn, Lowell McCown, Tim McVey, Randy Miltier, Thomas Mishler, Gordon Nelson, David Nordmann, Rod O'Connor, Daniel Sampson, Peter Skinner, Harry Teufel, Edwin Tharp, Roger Winsor, Jeff Wolf, Robert Zent.

Leading off our new member intros this month is ARNOLD BODNER. He's a student and is just getting into the hobby, so any tips you can pass along will be welcome, I'm sure.

DAVID CARRIER is a salesman who's into TV DXing. His gear includes a Vaulter II amp with a Winegard VHF antenna on a 50' tower.

Joining the growing ranks of insurance agents in the club is WILLIAM STANKEVITZ. He's a TV DXer with the following equipment: Radio Shack VU160 antenna, Radio Shack preamp, Rohm 48' tower, Winegard distribution amp, channel 3 and channel 4 filters, and Quasar, Panasonic and Sharp TVs.

Tidbits.....

We have a couple items from member Saul Chernos this month, so let's get going: "Keep an eye on 91.5 when logging New York City and/or northeastern US FMers. "Radio North," of Pirate Radio Central (Network!) used that frequency. They plan to be on as often as they can, but on an irregular schedule. It is likely they'll use this frequency, but then again, with pirate radio you never know. They're also on 101 and I got them at over 100 watts(!) on 1616 kHz. The station is full of 60's music and philosophy. A caller from MA to the above station said he runs a pirate on a more regular (I think) basis, but at 100 milliwatts on 108.5. They should be easy to locate because of frequency during Es. They're on the South Shore (MA) area near Cape Cod. Lots more pirates...keep your ears open. I've heard of (not listened to - I've never heard an FM pirate) station in Kearney NE, Grand Rapids MI, Muncie IN (WELI), and others (WISU in NYC...they were broadcasting a while ago). I'm also told by Neil Dickerson that he had KTVU-2 San Francisco CA on 2Es and tentative on 3 in AZ on December 28 Es opening. All I had was WBRZ-2, as I had to leave. Lots of winter skip. Neil even had some in mid-late January. Hope it doesn't mean a lousy summer Es season. Also, if anyone has pirate info could they send it to me. I hope to organize it all into some sort of reference this summer." Now, the second item from Saul: "I'm now living in Ottawa ON, where I have access to everything you always wanted to know about the CRTC but were afraid to ask. Now there's no

(Chernos, cont.) need for fear...I'll be glad to answer, to what extent is possible, any of your queries re this bungling bureaucratic organization. Of course, I'll do my best to relay info on a regular basis to FCC FM & TV, and other columns as I see fit. It may take me a few years, but I'll try! My offer to CSL non-Verifiers now applies to Ottawa as well as Toronto and Peterborough. I'll also do the following networks: CKO-FM, TV-Ontario, Global-TV (they should CSL), CBC (only stations on Montreal, Quebec City, Toronto and Ottawa networks, e.g., Radio, Stereo, TV, both English and French). Anything within 50 miles of the three cities can also be handled here. Do not send 'original' reports- copies are best in case they get lost. And lastly, re the Es Alarm mentioned here in the July '81 WUD...if you call this way, be sure to call collect. Your 'callee' then does not have to accept it, as he understands the message. It may not be ethical in the opinions of some, but it does work. I would suggest calling only if 1) the Es were MUF FM (88.1) or 2) very strong tropo or aurora, or 3) if you feel a DXer might really benefit. Unfortunately, I have no phone at my Burnt River DX shack, but I may work out an alternative. And re the Indiana pirate WELI 88.5... note the calls exist in New Haven CT for 960 KHz AM. Pirates can be confusing. If there are 7 pirates in the Indianapolis IN area, imagine how many exist in the US, Canada and abroad!" Saul's address is c/o Carleton University Residence, 1233 Colonel By Drive, Ottawa, ON K1S 5B7. A couple notes on pirates: Indianapolis has long been a hotbed of pirate radio, primarily on the AM band. Many of you will remember the infamous Radio Free Naptown of the early 70s. You probably could've called it the pirate capital until New York started it's pirate craze a few years ago. Muncie also had an FM pirate in the early 70s, run by a former IRCA member. By these mentions of pirate radio, let it not be construed that WTFDA endorses illegal activity of this kind (or any kind, for that matter, hi). Illegal or not, such stations constitute legitimate DX targets, and are reported with that thought in mind. Anyway, I'd like to hear an FM from Massachusetts, legal or not, hi!

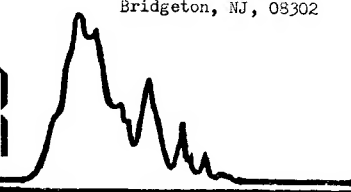
Here's something from a non-member you might find interesting. He's Drew Techner (3719 Bellaire Road, Philadelphia, PA 19154), who writes, "I'm a NRC member. I am trying to promote an FM station in my area (non-commercial). It is WCVH in Flemington NJ on 90.5 MHz with 39 watts. I thought the best way to spread some word about it was the WTFDA. Mainly what I am trying to do is get as far away as possible listeners (DXers) to call a certain DJ at (201) 782-9595 on Monday nights, 10:30PM-1:30AM. The station is clear as a bell (liberty?-jz) here in Philadelphia (33 miles DX from transmitter). Some info about WCVH: 90.5 MHz, with transmitter in Cherryville NJ. Transmitter is Wilkenson solid state transmitter producing 50w, 39w horizontal and vertically polarized. 6:30AM-1:30AM Broadcast day. 460' HAAT. The disc jockey is 17 year old Doug Lukowski. I've never even been to WCVH, but call up every Monday and he patches me over the air and we have a ball (he takes requests)!"

The final item comes from another non-member, Kenneth Austin: "I am a prisoner in one of the Florida Correctional Institutions and would like to correspond with someone who could teach me how to get the most enjoyment out of my Hamilton pocket size stereo. I am hoping you can connect me with someone who would give me a few hints. I don't know much about radios, but recently purchased one. I read about your group in the Encyclopedia of Associations. Kenneth's address is #068634, P.O. Box 37, RJCI, Chattahoochee, FL.

This issue marks a milestone for me, as it was 7 years ago I did my first column. Many of the members who were around to read that first column are still in WTFDA, which is a tribute to them and the club. At first, it was only a bi-monthly column, but quickly evolved to monthly, thanks to the rapid growth of the club. Terry Colgan was my predecessor... now he's really into shortwave DXing and is a contributor to the ANARC Newsletter. I'm going to surpass my term of editorship in IRCA (7 1/4 years) doing Central/Eastern DX Forum, but after that..... Remember, your contributions to the column keep it on goin' (as Amy Grant says), so keep those cards and letters coming. There's already been some great DX this winter, which bids well for the coming spring and summer. See y'all next month.....73.....jz

METEOR SCATTER INSIGHTS

Bill Fahber
336 Atlantic St.
Bridgeton, NJ, 08302



A NEW COLUMN IN THE VHF-UHF DIGEST

This column is designed to discuss only one mode of propagation: meteor scatter. This column will probably appear quarterly, not monthly, and is not meant to be a substitute for sending MS reports to the regular DX columns.

The Purpose of Meteor Scatter Insights is to serve as a forum for anybody who wants to discuss meteor scatter DX, or to report on various topics related to meteor scatter. This column will forecast future meteor conditions, and tell you what meteor observers thought of past meteor showers.

SPORADIC METEOR FORECAST

Although sporadic meteors appear to be totally random in velocity and direction, there are daily and yearly variations. As was mentioned in the first MS article (April, 1981), sporadic meteors can be up to 4 1/2 times as frequent at around 6:00 a.m. local standard time as at 6:00 p.m. local standard time. For latitudes around 40° North the ratio may be closer to 2 1/2.

There is also a yearly variation. Sporadic meteors are about three to four times as frequent during the peak month of July as during the minimum in February. The rates of sporadic meteors steadily increase from February to July, then fall to another low point in October.

SHOWER METEOR FORECAST

Because of meteor break-up and other suspected factors, many meteors cannot produce good reflecting trails. The composition of meteors in trails canthus produce a factor in addition to the observed hourly rate which will affect reflection rates. Meteors containing ice will break up more frequently than solid iron meteors. According to a chart in the article by George R. Sugar, "Radio Propagation by Reflection from Meteor Trails" in the February, 1964 IEEE Proceedings, the Delta Aquarids seem to have almost as good a reflection rate as the Perseids despite their fewer numbers. So don't wait until August 12 for a good meteor scatter night. Delta Aquarids are at their strongest around July 28 to August 12. Best results for Delta Aquarids can be found around 3:00 a.m. local time.

Several good daytime showers occur in May and June. The strongest of these is the Arietid shower, which is the same meteor

stream as the South Delta Aquarids. The Arietids peak on June 7, with best results being around 10:00 a.m. local time.

FALSE CCI PATTERNS DURING TEST PATTERN METEOR SCATTER BURSTS

Meteor trails frequently reflect two or more co-channel stations simultaneously to a single receiving point. To the receiver this would appear as a picture covered with CCI lines on a previously dead channel. But sometimes what appears to be CCI lines may be something else.

CCI from two stations of the same offset, if greater than 30 Hz, can be seen as one or more black horizontal bars, associated with a humming sound whose pitch is equal to the frequency difference. By multiplying the number of bars on the set by 60, and adjusting for the direction of drift, you should be able to calculate the frequency of the tone as well as frequency difference of the stations.

The best hours for watching meteor scatter is during the early morning, because of the greater number of meteors and because most of your locals will probably be off the air at that time.

One particular station comes in on my set frequently with the same particular CCI pattern and sound. But then during a strong burst I realized that the CCI sound and pattern were identical to the test tone being transmitted at the time. What was so different about meteor-reflected signals that could cause audio tones to appear as lines over the video portion? The answer lay in the type of reflection and in the receiver.

The TV set puts both audio and video signals into the IF amplifier, after which they are separated: the stronger into video, and the weaker one, being 4.5 MHz higher, into the audio (audio signals being 1/5 to 1/10 the strength of the video).

But with overdense-distorted meteor bursts the two signals will vary in strength in unrelated patterns, and the audio signal can be at times greater than the video signal.

The television set, not being able to distinguish between the two, will superimpose the audio signal over the television's picture. This is similar to the effect produced by the 75 MHz airline beacons, or by harmonics from amateur radio or citizen's band radio: the signal appears on both the audio, and on the video as lines.

FCC FM NEWS

Bruce F. Elving, Ph.D., Editor
4515 Avenue "E"
Kearney NE 68847

Contributions invited!

New FM Stations Granted

CA Pasadena 106.7 25500 h.v.; 650' Spanish, Latin to replace KROQ-FM, deleted by FCC.
CO Leadville 93.5 3000 h.v.; 42'; rock (delete K228AG 93.5 Leadville)
IL Metropolis 98.3 3000 h.v.; 300'; to serve Paducah KY
IL Vandalia 96.7 3000 h.v.; 300'; Stereo
KY Owensboro 90.3 5000 h.v.; 73' KY Wesleyan
MD Salisbury 105.5 3000 h.v.; 300'; rock
MS Jackson 90.1 100000 h.v.; 450'; J. C. Maxwell Group
NV Incline Village 100.1 700 h.v.; 630'; rock
NV Winnemucca 92.7 80 h.v.; 2120'
NC Beaufort 103.3 100000 h.v.; 460'; rm
ND Dickinson 92.1 3000 h.v.; 300'; m
OK Elk City 96.5 100000 h.v.; 500'; k
OR Sweet Home 107.1 3000 h.v.; 140'; m
PA Folsom 94.9 14 watts h.v.; 20'; Ridley School District
PA Swarthmore-WSRN 91.5 near Folsom—should be in large print on FMaps
WY Powell KPCO 97.9 100000 h.v.; 1860'; S, K—to be on air by June 1, 1982
MEXICO Ciudad Juarez XHH 100.7 50000 h.v.; S, k (not deleted)
Ciudad Juarez 105.9 XHGU (not XHSU) rock (Spanish)

Formats/Networks' Changes

AL Decatur WRSB 96.9 NBC, no SCA
AZ Apache Junction KSTM (net KSTN on my maps) 107.1 rp
AZ Mesa KOKS 93.3 rock
AZ Thatcher KFMH 99.1 rk, "KFM 99"
CA San Francisco KSFX 103.7 rp
FL Fort Lauderdale-Miami WHYI 100.7 A
FL Jupiter WCEZ 96.7 no network
GA Gainesville WWID 106.7 I (ABC-Info.)
IL Chicago WUSN 99.5 k, "US-99"
IL Morris WCSJ-FM 104.7 k, "Country Stereo Junction"
IA Spencer KICD-FM 107.7 S (AP Audio)
ME Machias WALS 95.3 now k, NBC (not T); now 100X AM simulcasting
MA Boston WMLX 106.7 r, "Magic 106," not "FM-107"
MA Boxford WBMT 88.3 rock
MA Bridgewater WBIM 91.5 disco and rock
MA Framingham WDJM 91.3 jazz and rock
MA Milton WMLN 91.5 progressive rock
MA Sudbury WYAJ 88.1 rock [Radio]
MA Worcester WICN 90.5 P (National Pub.)
WCUW 91.3 rock & ethnic
MI Holland WHTC-FM 96.1 no longer Mutual—network reportedly dropped them
MI Jackson WJXQ 106.1 rp, "great signal now with their new 50,000 h.v.; 490"
MI South Haven WGSV 98.3 m, "Entertainers"
MI Whitehall WCNF 95.3 NBC (erratically)
TN Chattanooga WSKZ 106.5 S (AP Audio)
TN Nashville WSM-FM 96.5 T (S)
TX Brownsville KRXX 99.5 T (The Source)
WA Seattle KYYX 96.5 Y, not Z, "The Super Station"
WA Walla Walla KUJ-FM 95.7 rock
WA Wenatchee KYJR 104.9 rock
WV Clarksburg WKWK 106.5 NBC, still no \$
WI Milwaukee WLUM 102.1 rs, "Love 102"
WI Waukesha WAIL 106.1 k, "Country 106," BACK ON THE AIR!
BC Squamish (note correct spelling) CISO 104.9 rm, "Mountain Radio"

Facilities' Changes Granted

AZ Parker KMDX 99.3 43 h.v.; 1010'
CA Cupertino KKUP 91.5 200 h.v.; 2580'; back on air, mono, heard with L/Spanish, but not certain if this is a format change or not
CA Modesto KUUL 92.1 300' (3000 h.v.)
CA Marysville KRFD 99.9 2000 h.v.; 2000'
GA Tifton WABR 107.5 (from 90.5) 29 watts (horizontal), 180'
IL Lockport WLRA 88.1 directional
IN Fort Wayne WBCL 90.3 50000 h.v.; 4C0'
IA Cedar Rapids KOJC 89.7 200 h.v.; 28'
KS Wichita KICT 95.1 900' (100000 h.v.)
KY Bowling Green WKYU 88.9 100000 h.v.; 720'
LA Oak Grove KWCL-FM 96.7 3000 h.v.; 290'
ME Lewiston WRBC 91.5 120 h.v.; 18'
MA Barnstable WQRC 99.9 380' (50000 h.v.)
MI Allendale WSRX 88.5 vertical
MT Hamilton KLYQ-FM 95.9 1600 h.v.; 390'
NV Las Vegas KORK-FM 97.1 1940' (50000 h.v.)
NY St. Bonaventure WBSU 88.3 170 (h.v.); 90'
NY Southold WBZA 101.7 2000 h.v.; 360'
OH Akron WAUP 88.1 325 h.v.; 800'
OH Ashland WNCO-FM 101.3 500' (50000 h.v.)
OH Port Clinton WOSE 94.5 620' (50000 h.v.)
SC St. George WQWV 107.5 680' (100000 h.v.)
TN Nashville WPLN 90.3 80000 h.v.; 1130'
TX Houston KIKK-FM 95.7 1425' (100000 h.v.)
KSRR 96.5 1920' (100000 h.v.)
TX Pasadena KYND 92.5 100000 h.v.; 1425'
VT Johnson WJSC 90.7 (from 91.5) 155'; 485'
VT Northfield WNUB 93.9 (from 89.1) 18'; 380'
VA Walla Walla KSXT 97.1 100000 h.v.; 1360'
WV Fairmont WFGM 97.9 26000 h.v.; 655'
WI Monroe WEKZ-FM 93.7 45000 h.v.; 530'
PR Mayaguez
WAEI-FM 96.1 9900 h.v.; 2010'
MS Jackson WJSU 88.5 (from 90.7) 3000h.v.; 160'
MS Jackson WWCJ 89.3 ("91.9 6300 h.v.; 300'

Call Letters' Changes

AR Harrison 96.7 KCWD
AR West Helena 104.9 KQEE
CA Palm Springs 106.1 KPML
CA Camarillo 95.9 KZTR (KGAB)
CO Denver 105.1 KBRQ-FM (KADX), still k, "105-Country," now I (ABC Information)
FL Sarasota 106.3 WMLL (WSPB-FM)
GA Albany 101.7 WKAK (WVCW)
IL Chicago 99.5 WUSN (WEFM), k, "US-99"
IN Crown Point 103.9 WWCJ WWCJ (WFLM)
KS Kansas City 94.1 KFKE (KCKN-FM), still "FM-94," no Mutual
MA Deerfield 91.7 WGAJ
MN St. Paul 102.1 KEEY-FM (KEEY-FM)
MS Fayette 97.7 WTYJ
MO De Soto 100.1 KOLS
MT Great Falls 92.9 KLFM
MT Missoula 100.1 KZQD (KYL-FM)
NE Broken Bow 98.3 KBBN-FM
NV Sparks 100.9 KNAA
NC New Bern 89.5 WTEB
OH Wilmington 102.3 WSWO (WKFI-FM)
OK Tulsa 96.5 KRAV (KRAV-FM)
OR Coquille 102.3 KSHR-FM (KWRO-FM)
MT Belgrade 96.7 KCDQ (KMZQ), also affects translators: Bozeman 98.3, Gallatin 98.3, Livingston 99.3, White Sulphur Springs 98.3
PA Shamokin 95.3 WSPJ (WISL-FM)
SC Aiken 95.9 WBPB-FM (WPB)
SC Camden 94.3 WUPB-FM (WPUB-FM)
SC Ladson 91.5 WKCL
TX Huntsville 101.7 KHUN (KSAM-FM)
VA Warrenton 107.1 WWWW (WEER-FM)

WA Richland 89.1 KFAE-FM
WA Seattle 93.3 KUBE (KBLE-FM)
WA Grant 95.9 WTZB (WQIT)
WV Morgantown 91.7 WVVU-FM
MEXICO Ciudad Juarez 105.9 XHGU (not XHSU), rock (Spanish)

ABC Direction Affiliates (Code: D)

AL Birmingham WKXX 106.9
AZ Tucson KWFM 92.9 (was A)
AR Little Rock KLPO 94.1
CA Goleta KMGQ 106.3
CA Sacramento KXOA-FM 107.9 (was T)
CA Santa Maria KXFM 99.1 (was A)
CT Hartford WHCN 105.9 (was A)
FL Fort Lauderdale WSHS 103.5
FL Tampa WYNF 94.9 (was A)
ID Moscow KRPL-FM 103.9 (was E)
IL Crest Hill WCCC 98.3
KY Murray WAAB 103.7 (was A)
NC Durham WDBS 107.1
SC Anderson WAIS-FM 101.1 (was M)
TN Knoxville WIMZ 103.5 (was T)
TX Fort Worth KTXQ 102.1 (was A)
TX Houston KSRR 96.5 (was Y)

ABC Rock Radio (Coded K)

CA Chico KFMR 93.7 (was A)
CA San Francisco KSFX 103.7 (was A)
DC Washington WROX 107.3 (was A)
IL Chicago WLS-FM 94.7 (was A)
IL Urbana WKIO 103.9 (was A)
IA Des Moines KMGQ 93.3
KS Wichita KICT 95.1
KY Henderson WHKC 103.1 (from T)
MD Baltimore WYVY 97.9 (was T)
MA Brookline WBSO 92.9 (was S)
MI Ann Arbor WIOB 102.9 (from A)
MI Detroit WRIF 101.1 (from A)
MI Flint

WYCK 105.5 (from A)
MI Grand Rapids WLAJ 96.9 (was T)
MI Ishpeming WMQT 107.1 (from I)
MN Golden Valley KQRS-FM 92.5 (from T)
MO Columbia KFMR 93.8 (from A)
MT Missoula KZQD 100.1 (from Y)
NE Omaha KEZO 92.3 (from A)
NM Albuquerque KWXL 94.1
NY Albany WYPX 106.5 (was Mutual)
NY Manlius WAQX 95.3 (was A)
NY Niagara Falls WZV 98.5
NY Poughkeepsie WPDH 101.5
NC Winston-Salem WKZL 107.5
PA Harrisburg WTPA 104.1 (was A)
PA Philadelphia WYSP 94.1 (from T)
VA Charlottesville WUVA 92.7 (was A)
WA Bellingham KISM 92.9 (was A)
WI Wausau WIFC 95.5 (from A)

CBS Radio-Radio (Coded O)

AZ Phoenix KODL 94.5
CA Los Angeles KFI 105.9 (was T)
CA San Francisco KRQR 97.3 (from C), rp, "The New Rocker"
IL Chicago WBBM-FM 96.3 (from C)
MO Catonsville WYZZ 105.7 (from CBS)
MA Boston WEEI-FM 103.3 (from C)
MI Detroit WZCY 95.5
MN Minneapolis WCCO-FM 102.9 (from Y)
MO St. Louis KMUX-FM 103.3
NY New York WBSZ-FM 101.1
PA Philadelphia WCAU-FM 98.1
TX Houston KRLY 93.7
ON Windsor 93.9 CKVJ (CKLW-FM), now 60 bands music from the 1940's

FCC-FM

Stereo (S)

AK Haines KHNS 102.3
AK Sitka KCAW 104.7
AK Yakutat KJFF 103.9, g
CA Mendocino KWFS-FM 92.7, mc
CA San Francisco KUSF 90.3
MA Easton WSHL 91.3
WA Tacoma KPEC 90.9 rock and talk. On 8 am to 10 pm, but silent during school breaks and all of August. No network.
WA Cody KTAG 97.9 rock, AP Audio, on air

SCA (+ 67 kHz)

AZ Chandler KMLE 107.9 tX
AZ Phoenix K-VX-FM 102.5 tX
CA Fresno KFCF 88.1 tX (main carrier is a hodge-podge)
FL Tampa WYNF 94.9 no SCA, "95-FM..." (local kick [obsence]) slogan
FL Winter Park WLOQ 103.1 no SCA, "Q-103"
NE Norfolk KEAL 106.7 tX
WA Bellingham KNWR 104.3 no Mutual—only carrier: sometimes tone

SLOGANS/NON-IDs

FL New Port Richey WPSO 105.5 Pasco-105%
FL Orlando WMFE-FM 90.7 FM-90 Plus
GA Buford WGOO-FM-102
SC Greenville WESC-FM 92.5 Big Country
WFCB-FM 93.7 94-FM (net: FM-94)
TN Cleveland WLCT 100.7 Q-101
WI West Salem WISQ 100.1 Q-100 (not on air, but slogan on billboard's), to 1600 h.v.; 390'

READERS' REPORTS AND COMMENTS

Two reporters mentioned the article in the March RADIO-ELECTRONICS about SCA, and West Germany's Automatic Road Information System. John Ebeling, while in Germany using a rented car, heard it, and it was identical to the main channel when he listened. I am now offering an ultra-simple SCA adapter with no circuit board, relying on point to point wiring for fitting into extremely small spaces in radios at \$8 for one or \$6 for more than 1; instructions included. Ask for my SCA "bag of parts." John also sent an article about TV channel 1 from that issue, but that article, and one in the VUD recently, failed to mention whether any Channel 1 stations ever operated. I recall reading KPRO-TV Riverside CA on channel 1 in an old White's Radio Log, but do not know if this station in Don Erickson's town was ever on the air, or if it was joined by any other such stations or construction permits. John asked about the local Muzak court trial. Two days before there was to be a jury trial, the case was dropped, with Ag-Tonic, Inc., agreeing not to play Muzak. The defense lawyer and I were sorry about that, as we thought we had a good case. I have notified the FCC I am operating my "Beam" on FM 107.0, but so far no response. I expect they are too busy to bother with my "Beam," but I am covered by having notified the FCC, in case somebody else should complain about my operation.

The new KICB 88.1 Fort Dodge IA now on the air 7:30 a. m. to 11 p. m. seven days a week, now with 200 watts and stereo. A lady in Kankakee IL mentions how she likes to use AM (WILL-AM) while driving, but finds they have converted mainly to talk on AM, and this she does not like. She is taking a copy of my FM ATLAS to China, where a friend is teaching; it will be donated to the library of the Chang-chun Institute of Post and Telecommunication, Changchun, Jilin. Tom Corneil heard WLO-FM Frankfurt IN 99.7 testing its new transmitter at Middle Fork IN, 50000 h.v.; 460'.

Blue Lake MI's fine arts station on 90.3 is being indefinitely delayed in starting, due to financial problems. WQWQ 104.5 in Muskegon now uses the satellite-fed Bonneville Beautiful Music format, but with local spots and announcers. Phil Boersma says that as of Oct. 1, 1982 WSRX 88.5 Attentia MI will cease to exist. "The college will apply for a new station on 88.5 with 150 h.v. and a height of about 600 feet; cars will be WGVC-FM. The station will be managed by a fulltime, paid manager (salary about \$30,000+). Although students will still be doing airwork, they will have NO say in the day-to-day operation of the station. Format is expected to be cJ." On air: WGGI 91.1 Houghton MI, with MN Public Radio. IDs are dual with WSCD 92.9 Duluth MN.

One of my customers, Leonard Kantzper, writes: "In years past, FM ATLAS was an important part of my research which led to the ultimate founding by me, development of, and establishment of: WSVH FM 91, Savannah GA. Thank you." Sharp-eyed John Jefferson continues to find FM ATLAS errors: WBLX 92.9 Mobile AL is credited with 84-mile coverage! [Should be 40!]. He says KKKH12 Pleasanton is off the air again. "I complained about strong spurs on 87.9 and 103.6, so they shut it down." "About those elusive Mexicans... XHB 99.7 Tijuana was logged 5-23-81 in Pasadena and heard 5-24 in San Clemente, again with no legal ID, but were heard to say 'aquí en Tijuana,' which placed them effectively." I am still not listing them until I have more definitive information. WJBB 88.9 Hayward WI to be on the air by April 1. Preview of their shows Sun. eve. WBSA 88.9 Brule, splitting from WERN.

John notes some duplicate FM translator information—confusing, because the FCC and NTIS lists confirm the duplicate call letters for the following: K265AQ Inyokern CA and Bonners Ferry ID, K249AD both in Inlay NV and Deadwood SD, K237AM both in Philip SD and Tabiona UT. John also finds errors in my listing K8XL 94.1 Caldwell ID coverage as 15 miles, instead of 55 miles, KORK-FM 97.1 Las Vegas has correct coverage but incorrect height and power—list as 50000 h.v.; 1950'. On p. 81 the calls should be KLUC, not KORK-FM, WA Cheate. 93.5 should be KOZI-FM, not KOSI-FM. And on the FMaps, the KALL translator in Evanston WV should be on 105.5, not 103.5. "All Walnut Creek boosters off at last report. Landlord didn't renew their lease on the transmitter site, so are off pending relocation."

A broadcaster in Wisconsin comments on my FM ATLAS essay mentioning "this John White character, who owns KQYB 98.3 in Spring Grove MN. I thought that his comment about being in mono was very dumb. This whole area has irregular terrain but it doesn't stop all that I know of from staying away from stereo transmission. In fact, I had a chat with the guy once. And to make a long story short, he told me the reasons he was not going stereo was that stereo was a gimmick and that most of his listeners would be farmers in their tractors. I think I'll stop there on that. Take it for what it's worth... A short on translators. There is one in nearby Coon Valley WI (106.3). From what I have been told, it has been so poorly put together that only a handful of people can get it."

KCAW 104.7 Sitka writes: "Thus far, we have no exotic SCA plans. Because of our height above average terrain of minus 612 feet, we are a bit afraid of multipath off the mountains. We want to see what the multipath will be like before we plan to use SCA. Because of the terrain, we should get out well over the Pacific Ocean, and down the coast, but be stopped dead by the mountains behind Sitka. A coverage radius published for Raven Radio would mean little... One other thing, don't forget KMTE at the Mount Edgecombe High School in Sitka. Since it is run by a B. I. A. school, it is not licensed by the FCC, but by Commerce. KMTE is on the air now with rock programming from 3 to 5 in the afternoon, and Big Band from 2:15 to 3. We will be feeding them some school basketball games which we do not intend to carry." KMTE is a total mystery, not appearing on any published list, nor is its frequency known. Anybody wanna write the BIA, Commerce Dept., or the high school for more information about this station—its frequency, power, height, polarization, stereo?

One writer says: "New York City's FM Dial (in the new FM ATLAS) was interesting. I noted that the primary coverage radius was given in kilometers there. I think kilometers should be the standard for the whole book. It might be easier to give the powers in kilowatts (kW), instead of watts, too. I'd like to suggest Los Angeles' FM Dial for a future edition. Most of the transmitters are on nearby Mt. Wilson. It would be interesting to see which other hits are used."

CONTRIBUTORS:

Larry Dale Anderson, Miss AZ; Robert Baker, Humboldt IA; P. Boersma, Spring Lake MI; A. J. Chamberlain, Hinsdale NY; Richard Clark La Vega, Dominican Republic; John Combs, Orlando FL; Tom Corneil, Greentown IN; John Ebeling, Bloomington MN; Bill Fletcher, WHLA-FM-TV, La Crescent MN; J. M. Jefferson, Pleasanton CA; Mrs. Edgar J. Johnson, Kankakee IL; Leonard Kantzper, Savannah GA; Nick Lombardi, Atlanta GA; Rich McClellan, KCAW (FI) Sitka AK; George J. Milson, Lynn MA; Remo Navarini, Clarksburg WV; Tim Noonan, Milwaukee WI; John Pascoe, Arlington WA; W. T. Ryan, Victoria BC; Peter G. Stackpole, Machias ME; John M. Sulak, Orlando FL; Bill Thompson, Buffalo NY (who says he has some FM news for this column—and he promises to send a letter and clippings soon!); T. Tomkins, Dade City FL; Robert Unmacht, Seattle WA; Roy H. Wilkinson, Bloomington MN. And Robert Wood, manager, KICB (FM) Fort Dodge IA. Also Mike Dukin, Hayward WI; William Fair, Painesville OH, who notes that WFSE Edinboro PA is now on 88.9 3000 h.v.; 310'. I am sure if A1 Ellis can read this, he can pick up WFSE in Brantford. Plus a few comments and contributions made by my own DXing—the Denver CO and Kansas City items. No trans-rockies troop heard here, but I do get Denver a high percentage of the time. Rumor has it KHOW-FM 95.7 may be off the air. I cannot get 95.7, as Grand Island is on 24 hours a day, but would appreciate somebody checking to see if 95.7 Denver may be inoperative. 73, until next month, Bruce Elving



TV NEWS

Bill Fahber
336 Atlantic St.
Bridgeton, NJ 08302

RETROSPECT FOUR: THE THAW

It was brought out in the February, '82 column that interference spawned by tropospheric bending beyond normal line-of-sight reception during the summer of 1948 was the cause of the FCC's freeze on processing applications for new television broadcast stations.

First, some background on how that problem came into existence.

Back in 1945, when there were only a handful of television stations, the FCC had the foresight to develop a table of channel assignments and minimum mileage separations. Co-channel stations were to be at least 150 miles apart in urban regions, and as little as 90 miles in rural areas or small communities. Adjacent channel stations were to be at least 75 and 45 miles for urban and small communities, respectively.

However, the Television Broadcast Association (TBA), with the support of the NBC and DuMont networks (more on that in a future issue), developed another proposal, reducing co-channel separation to 85 miles, and adjacent channel separation to 55 miles. The proposal also recommended the use of directional antennas, lowering maximum power, and increasing the number of assignments in New York City.

ABC and CBS, however, felt that the proposed table showed too much dependence on VHF channels, and that the FCC should give more thought into use of UHF for expansion of television. CBS was motivated to this view especially because of its earlier stages of color television, which was incompatible with monochrome, and would require wider channels. VHF had the disadvantage of interference from land mobile radio, which was sharing the same frequencies. UHF, in comparison, would be more free from interference.

By the end of 1945 the FCC modified its proposed table of assignments, using the suggestions by the TBA to reduce mileage separations, but making no ruling on the use of directional antennas. The plan called for 500 channel assignments distributed to 140 communities.

Although channel one was still assigned to television, it was apparently not used in the later FCC proposal. The removal of a channel one assignment to Trenton, New Jersey, is one of the factors resulting in that state's lack of commercial VHF coverage.

On August 4, 1947, the FCC announced a proposal which would completely eliminate channel one from television, and restrict

land mobile frequency sharing from any of the other channels (except 7 and 8). On May 5, 1948, this ruling became effective. But at the same time the FCC announced another proposal to overhaul the table of assignments, and plans to eventually move all television to UHF and gradually phase out VHF television.

This latest proposal, in order to spread more than 900 assignments to more than 500 communities, found it necessary to reduce minimum mileage separation even more yet. But this time response to the FCC revealed the problems that were existing due to tropospheric propagation and stations not far enough apart. With many new stations about to go on the air, and hundreds of applications waiting to be processed, and even shorter spacings proposed, television was headed toward a nightmare. After discussing these problems at a meeting on September 13-14, 1948, the FCC ordered the freeze on television applications, effective September 30.

The Joint Technical Advisory Committee (JTAC) was formed by the Radio Manufacturers Association (RMA) and the Institute of Radio Engineers (IRE; now IEEE) in June, 1940, and immediately began to look into the prospect of UHF television.

The JTAC recommended that, instead of scrapping VHF, UHF channels should be used to supplement VHF where the demand for television is too great for existing VHF channels. The committee also suggested 475-890 MHz as a good area for television, but cautioned the FCC that UHF could never equal VHF in potential coverage area.

The FCC authorized RCA to transmit an experimental UHF station on 529-535 MHz. This station was assigned call letters KC2XAK, and rebroadcast signals from WNBT, channel 4 in New York City.

Meanwhile, other comments also came into the FCC about the use of UHF. DuMont, having also done UHF work, favored the use of UHF channels, but advised against intermixture of VHF and UHF assignments to the same community, because of the inability of UHF to compete with VHF. DuMont also added that the top 50 commercial markets be assigned VHF channels only. TBA suggested that more UHF experiments should be done before UHF is used commercially. The JTAC and RMA, after further study, both urged that television be unfrozen and that UHF be put into use. The JTAC saw intermixture of VHF and UHF as inevitable, but RMA suggested that overlap be avoided whenever possible.

There had also been suggestions by various groups to allocate certain channels for color, but when CBS had finally conformed its color system to a normal 6-MHz channel,

that issue died.

In July, 1949, the FCC made another proposal for a table of assignments and separation standards, which were published in July, 1949. The issue was then dropped so that the FCC could tackle the color TV standard problem, which was expected to take about three weeks. It actually took until October 11, 1950.

On October 16 hearings on channel assignments and mileage separation were resumed. DuMont again came up with another proposal, this time including a greater intermixture than they had previously suggested. As with the earlier JTAC report, RCA predicted a problem which would later come to be known as the "UHF Handicap." Field tests of KC2XAK revealed that UHF was much more subject to shadowing than VHF. That is, UHF signals can be blocked by obstructions more easily than VHF. Also, while VHF and UHF would be equal up to 25 miles from the transmitter, the UHF signal would fade more rapidly beyond that point. RCA further pointed out that, because of this disadvantage, broadcasters would not want to risk the investment in UHF stations, and communities out of reach of a VHF station might not have any television at all. RCA recommended to the FCC that a thorough search be made in the VHF frequencies for additional channels, and that stations be allowed to operate at higher powers. The subject of carrier offset frequencies was also introduced in the hearings.

But another factor was beginning to take shape: various groups could see the beginnings of the deterioration of television into "the vast wasteland," and wanted to salvage a few assignments for noncommercial educational use before commercial interests used up all available channels.

Next month: objections to the new table of assignments, the first UHF station, the FCC's "Sixth Report and Order," and more, in RETROSPECT V: AFTERMATH!

June, 1982: look for RETROSPECT VI: RADIO AND TELEVISION NETWORKS.

SOAPBOX: THE NEWS STAND

A few interesting magazines which I came across recently were the 2/82 and 3/82 issues of Radio Electronics and the 2/82 Scientific American. The 2/82 R.E. contains the third part in a series on teletext, explaining how the decoders convert data into pictures. There is also an article explaining technical standards for various proposals before the FCC on "Stereo Audio for TV." An editorial on page 16 criticizes the FCC's decision to "let the three competing formats (for teletext. -wbf) fight it out in the marketplace."

I tend to be outspoken when I disagree, but in all fairness, I feel that the FCC decision is the best at this time. CBS' modified Antiope has greater diversity, but Prestel will be more within reach of those of us with limited means. The FCC isn't passing the buck; it is merely letting the marketplace decide for itself what it wants.

The editorial, as have other recent articles in other magazines, refers to three competitors: Prestel, Antiope, and Telidon. To the best of my knowledge, Telidon never applied to the FCC for standard approval, but the proposed FCC ruling will automatically open American teletext to Telidon as well as any others.

The 2/82 Scientific American contains a sixteen page advertising spread on Canadian technology, which gives a heavy push on Telidon, strongly suggesting that Canada may be preparing for a teletext invasion into the United States. Also in that issue is an article which I recommend to the Environmental Advisory Council of the Township of Onondaga in New York. It's entitled, "The Biological Effects of Low-level Ionizing Radiation." After that, I would recommend a few Mickey Mouse comics to bring them a little closer to reality.

Just received is the 3/82 Radio Electronics, including an article by David A. Ferre entitled, "What Ever Happened to Channel 1?" which really makes Retrospect I look sick. One thing that it mentions is that the FCC wasn't established until 6/22/1934. Before that it was the Federal Radio Commission (FRC). There are some minor inconsistencies between the article and the IRE reference used in Retrospect, but David Ferre seems to have really dug into some old material. Too bad he didn't list the references.

Speaking of references and inconsistencies, remember last month's Retrospect dating the formation of the NTSC to after the FCC adoption of the CBS color standard? Compare the following quotations:

"On November 20, 1950, an ad hoc committee, the National Television System Committee, was formed. It consisted of an all-industry group of engineers appointed to study compatible color standards." (American Broadcasting, p. 76)

"On July 31, 1940, under the RMA's sponsorship and with the FCC's blessing, the NTSC held its first meeting." (Radio Electronics, 3/82; p. 46; article by David Ferre. It is called the National Television Standards Committee in the article.)

"The debate (on standards -wbf) finally came to an end in the meetings of the nine panels of the National Television System Committee (NTSC). This group of 168 television specialists, in the period from August, 1940, to March, 1941, devoted 4,000 man-hours to meetings...." (Pink, Donald G., "Television in the U.S., 1927-1950.")

One final note. The latest edition of CFR (Code of Federal Regulations) Title 47 (Telecommunications) should be out any time now. If you don't see it at your newsstand, I'll let you know soon where to send for your own personal copy.

LETTERS FROM CLUB MEMBERS:

I finished last month's column with a few notes from a letter just received from Robert Grant. He mentioned that ABC News carried a news story supplied by WFSB, ch. 12 in Montgomery, Alabama, suggesting that

WPSA might have changed networks. Can somebody comment on that?

Phil Boersma reports that WDMA, channel 17 in Grand Rapids, Michigan plans to go on the air in March, 1982. They do not plan to use STV during the first year of service, however. The station will be Christian-oriented. He also says that several applications have been filed for channel 54 in Muskegon, Michigan, all requesting low ERP, and most planning STV. (The only two applicants being considered by the FCC are from Apogee and 6923 Bonnee, neither of which mentioned any STV as a source of income for operations; any other applicants must have missed the deadline set by the FCC. -wof)

Bill Draeb reports that W7SAJ (Fond du Lac) and W78AJ (Sheboygan) are definitely off. WBAY wrote to Bill that they are being replaced with two channel 8 translators.

Back to the offset mystery between KFDX and KENW. I wrote to KENW, ch. 3 in Portales about four weeks ago, and haven't received any response yet.

THE NEW CANADIAN TELEVISION CHANNEL ALLOTMENT PLAN:

The Canadian government adopted a new television plan which took effect October 24, 1981. The VHF portion of the plan is basically the same as before. Unlike the FCC Table of Assignments which depends on only mileage separations and carrier offsets to reduce interference problems, the VHF portion of the Canadian plan has an additional precaution: about half of the VHF allotments contain a limitation to protect certain existing stations written as footnotes. This has not been changed in the new plan.

The UHF situation is different. To begin, there used to be channel allotments above channel 69, with stations still broadcasting on those channels. Those channels have been reassigned to land mobile use and existing television stations on those channels need to change to a lower channel. In order to provide channels for those stations and avoid shifting other stations, the UHF plan underwent numerous changes. The United States government, in order to assist the Canadian government, shifter several channels in Michigan and Ohio.

Instead of attaching limitations as was done in VHF allotments, the UHF allotments were divided into three classes, coded A, B, and C. Carrier offset frequencies are still used as before, but mileage separations vary according to these three classes.

By way of background, all television stations in Canada are divided into four levels of priority of interference protection. Priority one stations are those occupying an assigned channel in the allotment plan. Priority 2 stations are greater than one watt output, but may operate up to ten watts for VHF or 100 watts for UHF. These stations do not occupy as assigned channel from the allotment plan, have no assigned offset frequency, and may not interfere with a priority 1 station. Nor is it protected from interference from a priority 1 station.

Priority 3 stations are one watt or less. Priority 4 stations are up to 100 watts for UHF and 10 watts for VHF, but are only used as relay stations, and their contour areas contain no population. Priority 1 stations, being listed on the allotment plan, are given a classification of A, B, or C, which are noted on the allotment plan. (Also, there are a few UHF allotments still containing a limitation footnote.) This classification is similar to that used in the FCC's table of assignments for AM and FM radio.

Five stations in Canada are presently still operating above channel 69 and are scheduled to change to the new assignments:

CHBC-TV-5, Enderbury, BC, from 72z to 16Bz
CBLFT-8, Kitchener, Ont, from 76z to 61C-
CBUFT-5, Radium, BC, from 77z to 28Bz
CBEFT, Windsor, Ont, from 78z to 54Cz
CITY-TV, Toronto, Ont, from 79z to 41Cz

Because of image interference on channels 62-69 from land mobile frequencies above channel 69, those channel allotments will be used only when no other allotted channels are available. In certain cities, those channels will be totally unavailable until such time as TV receivers incapable of receiving above channel 69 come into general use. Channel 14 is also to be avoided in some cities because it is adjacent to a land mobile band.

(Note: lest there be confusion in the terminology used in this article: In the FCC table of assignments, channels are assigned to communities and occupied by television stations. In Canada, and in this article, channels are allotted to the communities and assigned to the television stations. This is why the Canadian plan is called an allotment plan instead of a table of assignments. As for indicating a zero carrier offset, the FCC table gives no sign affixed to the channel number, which can lead to questions as to whether or not there was an offset and the symbol was omitted. The Canadian plan underlined zero offset channels. I prefer the method used by the Engineering Data Base, that of attaching a "z" to the channel. While some attach an "o," that could be mistaken for a zero.)

The three classes are distinguished as shown in the table below. Each class is limited to a maximum effective radiated power (in kilowatts), with antenna height limits dependent on the station's ERP. The intent is that the maximum radii of the Grade A and B contours are not exceeding those as shown (in kilometers) below:

CLASS	A	B	C
ERP/kw	10	100	1000
HAAT/meters	100	150	300
Grade A radius/km	15	30	55
Grade B radius/km	25	40	70

The plan also includes a table on mileage separations, and this is where things really become complicated. To begin, each channel in any future proposed channel allotment needs a separation from stations 1-4, 7, 8, 14, and 15 channels above it, and 4, 14, and 15 channels below it. But this channel can be an A, B, or C station, and so can the

station from which it needs to be separated. This results in nine sets of distance separation standards for each of the channel separations listed above.

Co-channel separation becomes even more complicated because the nation is divided into two zones (The United States, by comparison, is divided into three zones, but doesn't have class distinctions associated with the stations.) Zone 1, which covers the more densely populated areas of Ontario and Quebec, has slightly shorter separation standards as zone 2, which covers the remainder of Canada. There are nine sets of separation standards (in practice there are only six) for each of the two zones.

The published plan contains about 80 pages, 40 of which are in French, and 40 in English. I won't be as presumptuous as to assume that the Canadian government will always send materials free upon request, but that has always been my experience. But to obtain a copy of the plan, request D.O.C. Notice # DGTR-021-81: Canadian Television Channel Allotment Plan, and send to:

Information Services
Department of Communications
300 Slater Street
Ottawa, Ontario, Canada
K1A 0C8

Those planning to write from the United States, be sure not to use a "C" stamp, since they are for domestic mail only. Thanks to Walter Patton for supplying the address and the document number. I also wish to publicly apologize to Walter for failing to credit him with the Canadian material in the 1/82 VUD. He's been sending quite a bit of Canadian information to this column.

APPLICATIONS FOR NEW TELEVISION STATIONS

ch ERP HAAT City/State/Applicant
28 4404 827 Panama City, FL; Kenneth B. & Nayda Darby
47 721 796 Madison, WI; Madison Independent Television, Inc.
18 586 137 Cocoa, FL; Nat'l Christian Netwk
46 5000 1068 East Saint Louis, IL; East St. Louis Broadcasters
46 5000 1070 East St. Louis, IL; F.A.Herrera
46 1286 637 East St. Louis, IL; Mahogany Entertainment Television
46 2168 1070 East St. Louis, IL; Spectrum Telecommunications Corporation
44 5000 1717 Waco, TX; Latin American Bc'g Co
44 5000 1980 Waco, TX; Focus Bc'g of Waco, Inc
38 1334 1510 Roanoke, VA; Vine & Branch, Inc.

PREVIOUS APPLICATION AMENDED

7 316 1506 Brawley, CA; Si' TV, Inc.
CONSTRUCTION PERMITS GRANTED BY THE FCC
40 660 820 Tallahassee, FL; Holt-Robinson
45 5000 875 Schenectady-Albany, NY; Union Street Video, Inc.

6 100 946 San Angelo, TX; Sage Bc'g Corp
5 100 272 Lander, WY; Chrysostom Corp.
(originally applied for ch. 4, but was amended to ch. 5 because of a change in educational reservation.)
4 100 912 Williston, ND; Prairie Public Television
4 100 912 Williston, ND; Prairie Public Television
39 3160 580 Miami, FL; 39 Broadcasting, Ltd.

(CP's granted, continued)

ch ERP HAAT City/State/Applicant
(39 Broadcasting is a merger of two applicants: 39 Broadcasting Company and Contemporary Television Broadcasting, Inc.)
27 877 2930 Reno, NV; High Country Bc'g Inc
38 1776 768 Greenwood, SC; South Carolina STV Commission
--- --- San Jose, CA; Satcom, Inc. to operate experimental station KQ2XUL on ch. 15, 30, & 68.
21 1600 1589 Las Vegas, NV;

APPLICATIONS DISMISSED BY THE FCC:

40 Tallahassee, FL; JGM, Inc.
45 Albany, NY; Great Albany County Telec'g
6 San Angelo, TX; Morton Telecasting, Inc.
26 Daytona Beach, FL; Metrovision, Inc.
39 Miami, FL; Contemporary Television, Inc.
27 Reno, NV; Family Stations, Inc.
40 Santa Ana, CA; Saddleback Bc'g Co.
21 Las Vegas, NV; Alden Communications Corp; Broadcast West, Inc.; Channel 21 Corp.
22 Seattle, WA; Trinity Broadcasting of Sea.

APPLICATIONS TO MODIFY CONSTRUCTION PERMITS

23 302 Minneapolis, MN; KTMA-TV
15 536 1143 Centralia, WA; KCKA
43 4088 1434 Melbourne, FL; WKNA
66 5000 550 Manassas, VA; WTKK
24 ? ? San Juan, PR; WSJN-TV; change TL to 0.4 mile NE of Luis Santella

CP MODIFICATIONS GRANTED BY THE FCC

66 794 679 Opelika, AL; WSWS
34 3733 915 Lubbock, TX; KJAA
52 136 541 Sandusky, OH; WGGN-TV, change from channel 51
44 905 677 Lima, OH; WTLW

CHANGES IN EXISTING FACILITIES GRANTED

44 1974 1414 St. Petersburg-Tampa, FL; WTOG
40 2113 994 Indianapolis, IN; WHMB-TV; TL to 7701 Walnut Drive
13 316 1012 Jefferson City, MO; KRQC
13 302 2040 Lynchburg-Roanoke, VA; WSET-TV
8 316 1634 Selma, AL; WSLA
21 2950 2745 Asheville, NC; WHNS

APPLICATIONS FOR NEW CALL LETTERS

ch C.L. city/state/applicant
60 WBBS-TV West Chicago, IL; HATCO-60
4 KTBV Anchorage, AK; Totem Bc'g Corp.
4 WWSE Williston, ND; Prairie Public Tel
31 KVTX Victoria, TX; Community Television of Victoria

45 WUSV Schenectady, NY; Union Street Video, Inc.
28 WTGS Hardeeville, SC; Business and Minority Coalition Broadcasters, Inc.

APPLICATIONS FOR CHANGES IN CALL LETTERS

53 WLAI-TV Lansing, MI; Benko Bc'g Company
19 KDOG Nagdoches, TX; Dogwood Bc'g Corp.

CALL LETTERS GRANTED: NEW STATIONS

64 WDPB Seaford, DE; Del. Citizens Com'te
58 KCCA Sierra Vista, AZ; Sierra Vista Television, Inc.
21 WMPV-TV Mobile, AL; Mobile-Pensacola Broadcasters
67 WOAC Canton, OH; Canton 67

CALL LETTERS GRANTED-NEW STATIONS (cont'd)
 16 WUAA Jackson, TN; Golden Circle Broadcasting, Inc.
 58 KSCB-TV Stockton, CA; William H. Schuyler
 24 WQPT-TV Moline, IL; Black Hawk College
 23 KAYU-TV Spokane, WA; JusDan, Inc.

STV APPLICATION DISMISSED
 45 Albany, NY; The Great Albany County Tele-casting Corporation

CONSOLIDATED HEARINGS
 * Cotati, CA; channel 22 (Educational); Rural California Broadcasting Corp.; Black Television Workshop. Question arises as to whether or not Black Television Workshop is a nonprofit organization.

* Miami, FL; channel 39; Contemporary Television Broadcasting, Inc.; 39 Broadcasting Company (as notes before, these two have since this notice have merged. Two other competitors, Sunbelt Broadcasting and Florida Broadcast Ministry, have previously withdrawn their applications.

* Muskegon, MI; channel 64; 6923 Bonnee Corporation; Apogee, Inc.

* San Diego, CA; channel 69; Venton Corporation; Christian Communications Network; Federal Broadcasters, Inc.; San Diego Family Television, Inc.; LLMR Broadcasting, Inc.; Intersat Communications Corporation; Local Service Television, Inc.; Channel 69 Corporation. (Note: Petition by Palomar Communications, Inc., which manufactures land mobile radio equipment, to deny all the above applications because they would interfere with land mobile radio, was disregarded by the FCC because that involves the assignment of channel 69 in general, which is not in question here. The city government also opposes the use of channel 69. (Maybe they can establish their own Environmental Advisory council to study the effects of nonionizing radiation. -wbf))

RESULTS OF CONSOLIDATED HEARINGS
 * Tallahassee, FL; channel 40; dismissed JGM, Inc. and granted construction permit to Holt-Robinson Television, Inc.

* Reno, Nevada; channel 27; dismissed application by Family Stations, Inc. and granted construction permit to High Country Broadcasting, Inc.

* San Angelo, TX; channel 6; dismissed Norton Broadcasting, Inc. and granted construction permit to Sage Broadcasting Corporation
 * Miami, FL; channel 39; see above under Consolidated Hearings.

CHANGES IN THE TABLE OF ASSIGNMENTS
 Houston, TX; add 61z (K-Ram wanted to reserve the educational status of *14z, but the FCC preferred this alternative.)
 Greenwood, CO; add A8z

STATION ON THE AIR:
 WFLP-TV, channel 35, Richmond, VA.

A few comments should be said about WDPB, channel 64, the new station in Seaford, DE. It's owned by Delaware Citizens Committee, the same owners of W64AS, which it replaces. They apparently are using the same tower or one nearby, with very little difference in

power, so don't expect to see much change.

NEW FUNDING FOR PBS STATIONS

Noncommercial stations are normally not allowed to advertise, but are funded by donations from private individuals, estates, or corporations. Lately, programs funded by commercial establishments, have been acknowledging their funding by displaying that company's trademark, which had some individuals screaming that they were sneaking in commercials. But with the Federal government now cutting funds for noncommercial stations, another means is being sought, and an experiment is about to be done to test it. Ten stations were selected (by whom was not indicated) with authorization by congress, and subject to approval by the Temporary Commission on Alternative Funding for Public Telecommunications for an 18-month experiment in which these stations will use commercials. WNET (New York) and WQED (Pittsburgh) plan a longer version of the presently used underwriter credits. WHYY (Philadelphia (sic.)) and WQLN (Erie, Pa.) propose traditional commercials. WPBT (Miami), WYES (New Orleans), and WKPC-TV (Louisville, KY) plan a combination of those options. WIPB (Muncie, Indiana) is undecided. JFTW (Chicago) is also undecided. WSKG in Binghamton, NY, plans to contribute time to cultural and educational organizations which will grant discounts to WSKG members. As of yet no set date has been given for the beginning of this experiment. (ref: Broadcasting, 2/22/82)

ANOTHER TELETXT PROJECT: KIRO-TV, channel 7 in Seattle, began teletxt on 2/1/82, testing a modified Ceefax-Oracle.

FIGHTING TO STAY ON THE AIR:

RKO General is fighting the FCC in court to keep WOR, ch. 9 in New York and WNAC-TV, channel 7 in Boston, on. As of 2/15/82 it was reported that WNAC-TV might go off on 3/7/82.

REACTION TO THE FCC'S PROPOSAL ON TELETXT:

While reaction to the technical standards were favorable, the proposal to let the marketplace decide on a standard or standards was controversial. CBS, the original pusher for Antiope, is now pushing for NABTS, which is a modified version with Telidon features. Telidon Videotex Systems and RCA is also pushing for NABTS. ABC and the National Association of Broadcasters both favor the idea of a single standard and criticize the FCC decision, but give no preference on any of the standards or hybrids available. The marketplace proposal is favored by Zenith, Koplar, Field Communications, United Kingdom Teletext Industry Group, Satellite Television Corporation.

YET ANOTHER TELETXT STATION: WGBH-TV in Boston, with WGBX-TV, plan to begin a 12-month teletxt experiment this summer using Antiope system.

NETWORK CHANGE: KBCY-TV, ch. 9 in El Centro, California, changed from CBS to ABC.

FCC POLICY ON CONSOLIDATED HEARINGS:

Because of the amount of time consumed by the FCC in deciding between mutually exclusive applicants, the United States Congress authorized it to use a lottery system to select which applicant to approve. However, the FCC gave up efforts to implement that system.

SELMA, ALABAMA TO BIRMINGHAM:

WSLA-TV, channel 8 in Selma, Alabama, recently got FCC approval to move its transmitter location, presently 50 miles from Birmingham, to a place only 30 miles from Birmingham, raise its ERP from 53.7 kW to 316 kW, and HAAT from 360 feet to 1684 feet. This should help WSLA-TV, which has been losing money over the past few years, to get more viewers. But this move means more competition against WKAB-TV and WCOV-TV, two UHF stations in Birmingham. Since WSLA-TV and WCOV-TV are both CBS affiliates, WCOV-TV could possibly lose CBS affiliation.

This move indicates a major change in the policies of the FCC. The FCC up to recently had been giving UHF stations special consideration because of their inability to compete with VHF in the market. But the tendency lately has been toward less regulation by the FCC and more stress put on the marketplace. This has been evidenced also in STV deregulation, teletext proposal, and elimination of test signals in the VBI.

SPEAKING OF ELIMINATING VBI TEST SIGNALS:

Effective February 22, 1982, the law requiring that television stations using remote control transmitters use certain test signals on scan lines 17 and 18 during operation has been dropped. Observing the VBI over the ten days since then, it seems that nearly all stations are still using test signals as before.

MEDIA CONTROL OF TELEVISION AND RADIO

Ken Onyschuk sent me some notes from an article in the December 7, 1981 Advertising Age, on the top 100 media companies in the United States. Not knowing anything at all about the subject, I thought it necessary to dig up some background information from the FCC rules on "Multiple Ownership."

The FCC has established a set of rules governing ownership of television and radio stations. The key word is "control," which includes stockholders, owners, officers, directors, etc. The basis of FCC regulation is that no one person or group have too much control over the public media, which would be contrary to the public interest.

The FCC will not grant a license for a TV station to a company that has another TV station where the grade "B" contours would overlap. (Recall in last month's column that one applicant for channel 61 in Wilmington, Delaware would have to null its signal toward WBFF in Baltimore because of this.) Nor may that station's Grade "A" contour cover the community of license of an AM or FM station under common control.

Nobody may be a stockholder or have control over more than seven television stations, no

more than five of which can be VHF stations. As examples, note that Gannett Co. of Rochester, NY, owns KPHX (Phoenix), KARK (Little Rock), KBTU (Denver), WXIA (Atlanta), WPTA (Fort Wayne), WLKY (Louisville), & KOCO (Oklahoma City). Another big owner is Gaylord Broadcasting Company, which is connected with Oklahoma Publishing Company, and owns WTVT (Tampa), WVUE (New Orleans), WUAB (Cleveland), KTVT (Fort Worth), KHTV (Houston), KSTW (Tacoma, WA), & WTVT (Miami). Times Mirror Company of Los Angeles owns KDFW (Dallas), KTBC (Austin), KTVI (St. Louis), WTVW (Birmingham), WHTM (Harrisburg, PA), WSTM (Syracuse) & WETM (Elmira, NY). Other big television owners are Bergen Evening Record Corp. of Hackensack, NJ; Media Properties, Inc.; Chronicle Publishing Co. of San Francisco; Cox Broadcasting Corp.; Dunn & Bradstreet; Evening News Association of Detroit; Metromedia Inc. of Seacaucus, NJ. More on this when Retrospect hits the history of television and radio networks; Multimedia Inc. of Greensboro, SC; Park Broadcasting of Ithaca, NY; Storer Broadcasting Co. of Miami Beach, FL; and Westinghouse Electric.

It becomes evident from some of the above names that many of the owners of radio and television stations are also into other forms of media, such as newspapers, magazines and books. The FCC adopted rules a few years ago regulating that also. If a company owns the only daily newspaper in any community in the United States, it may not own or control in any way, any television station.

Lastly, if a company owns a television station, which is the only commercial television station to provide that community with a city-grade contour, it may not own or control any other television station in the United States.

This is only a quick review of television ownership and control. A full list would be too extensive for this column, but publications like Television Factbook and Broadcasting/Cable Yearbook could provide much greater detail on the subject.

NEW ENGINEERING DATA BASE JUST ARRIVED

I finally received this time on microfiche the new lists of Broadcast stations and Translator stations, updated to January, '82. The translator lists do not give any data on directional signals, but the power listings seem to be effective radiated power instead of the power output of the final radiofrequency amplifier. It gives the owners of the translator, which the previous list did not. The list is twice as long, because it lists all the low power broadcast applications which have flooded the FCC. I will have to charge anybody wanting copies of any portion since a microfiche reader-copier is needed. I haven't finished looking at the broadcast station list, but there seems to be quite a few changes in carrier offsets in the works. More information on these lists will appear in next month's column.

ALSO NEXT MONTH: More information on Canadian Television, Retrospect Four thaws out television, and more.

QSL CORNER

Thomas J. Yingling, Jr.
221 Pinewood Road
Baltimore, MD 21222
1-301-282-5649

TV-QSL's

- CT WTNH 8 New Haven, 135 College St., 06508. Letter from Richard Lynn, Asst. CE back in one week. Reese
- FL WCIX 6 Miami, P. O. Box 610001, 33161. QSL Card from Jack H. Lowartice in two weeks. Reese
- MI WIHT 31 Ann Arbor, Box 2267, 48106. Full data letter, including ant. specs, etc. from Alfred White, CE with reply in 8 weeks. Ross (my list show call letters is WRHT, as per 14th issue of Vane Jones, any more info from readers? ed.)
- NY WNPE 16 Watertown, Box 114, 13601. Full data letter from James W. Edwards, CE. Send contour map-tower illustration & ham qsl card. Ross
- NC WFMY 2 Greensboro. QSL Card from Frank Willis, CE in 13 days. Hollis
- OH WFMY 21 Youngstown. QSL card from Seymour J. Raymond, CE in 6 days. Hollis
- OK KOTV 6 Tulsa, 74101. Send letter & card from Don Stafford, CE. Gaines
- PA WPSX 3 Clearfield, % Penn. State Univ., Wagner Annex, University Park, 16802. Letter from Susan H. Steinmeyer, Asst. Dir. of Telecommunications. Reply in 3 weeks ...Johnson
- KYW 3 Philadelphia, Independence Mall East, 19106. Letter & coverage-map from A. Robert Fields, Eng'r Mgr. in 25 days. Johnson
- TN WMC 5 Memphis. QSL Card received in 6 days. Hollis
- WSM 4 Nashville. QSL card received in 8 days. Hollis
- TX KPRC 2 Houston, P. O. Box 2222, 77001. QSL card from unreadable name in one week. Reese
- KMID 2 Midland, P. O. Drawer B, 79701. Letter from Grady Woodward, CE, who also enclosed a sheet explaining E-Skip, and a booklet on NBC Broadcast Standards, reply in 6 days. Durkin

This month reporters are: Reese, Ross, Hollis, Johnson, & Durkin. Also this month we got more copies of QSL Cards from reporters: Hollis & Grant. I'm running low on tv qsls to use, so if any member got any not yet reported in, please do. Also the same for the fm dx'ers. 73's
Tom

KCRG-TV ch. 9 Cedar Rapids, Iowa
reply in 8 days, when in Ft. Campbell, KY

WDBJ-TV ch. 7 Roanoke, VA
reply in 9 days, when in Ft. Campbell, KY

KCRG TV CHANNEL 9 316 Kilowatts
AM 1600 KC 5000 Watts

The Cedar Rapids Television Company
CEDAR RAPIDS, IOWA

This is to verify your reception of KCRG-TV

August 22, 1978.

Walter G. Alliss, Jr., C.E.

This is to verify your report of reception of Channel 7's signal on
10/1/78 at 0511 CDST (time)
(date)



The WDBJ-TV transmitter is located on top of Poor Mountain in Roanoke County, Virginia. The tower is at 4000' above sea level (2000' above average terrain). We operate with 316,000 watts ERP.

W. G. Alliss, Jr. C.E.

KGFE-TV ch. 2 Grand Forks, ND
Grant

This will verify your reception of Prairie Public Television
on KGFE channel 2, Grand Forks, North Dakota
on 1/7/80 at 11:40AM EST
Thank you very much for your report. We wish you much
continued success with your DX viewing!



Don Geiken
Director of Engineering
Prairie Public Television

WTRF-TV ch. 7 Wheeling, WV
reply in 29 days, received in Ft. Campbell, KY

WTRF-TV
13300 RIVERVIEW DRIVE
WHEELING, WEST VIRGINIA

CHANNEL 7 COLOR

Hereby Confirms That

NAME Michael Hollis CITY Ft. Campbell, KY
HAS SUBMITTED INFORMATION WHICH AGREES WITH WTRF-TV'S
PROGRAMMING FOR AUGUST 22-78 AT 0430 CDST.

TOUR LOCATION: Richmond Heights, OH
Height above sea level: 1025 ft.
Aerial: 31,600 Watts

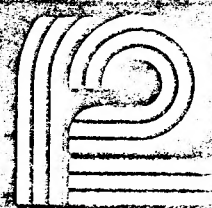
CBNAT-1 ch. 3 Baie Verte, Nfld
Grant

WISN-TV ch. 12 Milwaukee, WI
reply in 6 days, received in Ft. Campbell, KY

The
Canadian
Broadcasting
Corporation

is pleased to verify your reception
on June 24, 1981
of its transmissions from
Station CBNAT-1
Frequency Channel 3
Power 500 watts
This station is on the
CBC Nfld Network.
Per F. HOLM
Date SEPT 10, 1981

TRANSMITTER POWER
316 KW
FREQUENCY
204-210 MHz
TOWER
1735 FT MSL



THIS WILL SERVE TO VERIFY YOUR RECEPTION OF OUR STATION

ON August 22, 1978 FROM 0610 CDST

SIGNED *Walter G. Alliss, Jr.*

SOUTHERN FM DX

APRIL 1982

Danny Buntin, editor
1312 N. Skyline
Stillwater, OK 74074
Deadline: 5th

Jim Pizzi, P. O. Box 1778, Lovington, NM 88260 (505) 396-3432 - Jan 5 to Feb. 12
Equip.: Akai AT-V04, JVC VT-700, Antennacraft 10 el. 865', 2 Ameco tuneable preamps,
CD-44 rotor. (JVC VT-900 out of service) Log totals 104.

1/5 tr	1/11 Es
1933 KJSJ 97.5 TX San Angelo 196	1905-12 unIDs 90.3, 91.3, 91.9
KFNE 95.3 TX Big Spring, "K-95", rock	(TV into San Francisco, CA)
1/7 tr	1/29 tr
2058 KXOX 96.7 TX Sweetwater, 184	0200 KDJW 94.1 TX Amarillo, ID, AP nx,\$k 184
Texas State News net, ID 2100	0210 KJIN 92.9 TX Wichita Falls, m, 282
2135 KFMG 107.9 NM Albuquerque, ID 2145 240	"FM-92", automated, ID#0300
2322 KJYJ 100.3 NM Albuquerque, ID 2300, k-joy	0212 KJLL 92.9 TX San Angelo, r, \$ 196
2324 KZZX 99.5 NM Albuquerque, ID+(KJEF-AM)	0215 KJLW 93.9 TX San Angelo, k 196
2328 KUNM 90.1 NM Albuquerque	0223 102.9, 105.3 Dallas-Ft. Worth 368
2331 KJAK 92.7 TX Slaton, "K-Jack"	0230 102.1, 103.7 Dallas Ft. Worth 368
1/9 tr	2/12 tr
1123 KRPT 103.5 OK Anadarko, r, sports@1127	1934 KPTX 98.3 TX Pecos, ID 110
1129 KVIL 103.7 TX Dallas, ID o/ARPT 368	

Had to send my JVC VT-900 digital tuner in for repair. I've had it for about 7 years, and it's gone through some heavy DX sessions. Nothing unusual happening--TV Es on 1-29, 2-1 and 2-2 MUF reached ch. 4 on those dates. 1-11 started out ok, but Es into FM was brief. A good UHF-TV tropo opening on 2-23 and 2-24 never dropped into the FM. (LA & MS) Tropo should be good from here this spring.

New Akai AT-V04 acting up--won't scan and preselect, not working, but will tune in normal manner. I'll wait until VT900 gets back before sending it in. Best of DX, Jim.

George Rogers, 320 Lafayette Rd., Chickamauga, GA 30707 - EST 12-1 to 1-20

Equip.: Superadio Model no. 7-2880 B

12/1 ms	12/29 tr
0840 KGBI 100.7 NE Omaha, wx	0855 WFMF 102.5 LA Baton Rouge, mr
12/1 tr	1020 WALT 97.1 MS Meridian, wx
0930 WELR 95.3 AL Roanoke, mr	1110 WKRG 99.9 AL Mobile, aor
0940 WJDQ 101.3 MS Meridian, aor	12/20 tr
1020 WJMI 99.7 MS Jackson, ad	0930 WGGC 95.1 KY Glasgow, k
1035 WTYX 94.7 MS Jackson, aor	1110 WKQQ 98.1 KY Lexington, aor
1040 WLIN 95.5 MS Jackson, mor	12/31 tr
12/5 ms	1040 WDDM 101.3 SC Sumter, ad
0845 WILQ 105.1 PA Williamsport, wx	
12/8 tr	1/3 Es
0750 WHOP 98.7 KY Hopkinsville, ads	1707 KWYR 93.7 SD Winner, nx
0825 WMC 99.7 TN Memphis, nx	1709 KSDN 94.1 SD Aberdeen, k
12/9 ms	1710 KNEN 94.7 NE Norfolk, A. T. 40
0905 WOLC 102.5 MD Princess Anne, g	1710 KROA 95.7 NE Grand Island, g
12/10 tr	1715 KMAZ 92.9 NE Beatrice, k
1020 WROQ 95.1 NC Charlotte, ad	1720 KQKO 98.5 IA Council Bluffs, r
1045 WKIT 102.5 NC Hendersonville, k	1723 KINI 96.1 NE Crookston, k
ms	1725 KTCH 104.9 NE Wayne, ad
1205 CBON-17 95.1 ON North Bay, FF nx	1728 KYNQ 90.7 NE Omaha, r
12/23 tr	1730 KAAV 95.9 MO Bethany, k
1400 WDEM 105.3 GA Macon, ad	1730 KSEZ 97.9 IA Sioux City, r
12/24 tr	1735 KELO 92.5 SD Sioux Falls, m
0905 WKOA 100.3 GA Hopkinsville, mr	1738 KKRZ 93.5 SD Sioux Falls, aor
0905 WBAM 98.9 AL Montgomery, ad	1750 KQAD 100.9 MN Luverne
Es	1814 WKKK 93.9 MN Hibbing, k
1740 KTTL 93.9 KS Dodge City, k	1/4 tr
1742 KULL 94.5 KS Scott City, k	1145 WPEG 97.9 NC Concord, s
1743 KBRA 97.9 KS Wichita, m	1147 WBFM 98.1 SC Seneca, g
1745 KBUF 97.3 KS Garden City, k	1/8 Es
1747 KLMR 93.3 CO Lamar	0915 WDAY 93.7 ND Fargo, m
1748 KDSA 91.1 KS Wichita, c	1/12 tr
12/28 tr	1010 WBBQ 104.3 GA Augusta, mr
1000 WGLF 104.1 FL Tallahassee, aor	1015 WYSH 104.9 TN Clinton, ad
1000 WVOC 102.9 GA Columbus, k	1/13 tr
1010 WBAM 98.9 AL Montgomery, aor	1055 WGCC 102.3 GA Buford, g
1015 WHHY 101.9 AL Montgomery, ad	1145 WVOC 102.9 GA Columbus, ad
1115 WKIR 104.1 TN Jackson, ABC nx	1325 WXBQ 96.9 TN Bristol, k

cont.,

SOUTHERN FM DX

Rogers, cont.

APRIL 1982

1/14 tr	2/4 tr
1120 WSPA 98.9 SC Spartanburg, ads	0940 WZLO 98.5 MS Tupelo, a 170
1130 WCOS 97.9 SC Columbia, k	ms
1145 WITZ 104.7 IN Jasper, Swap Shop	0952 WTTM 98.9 WI Tomah, ad 580
1423 WAMZ 97.5 KY Louisville, wx	tr
1425 WKY 104.1 IN Evansville, m	1840 WGLF 104.1 FL Tallahassee, aor 300
1/18 tr	1925 WRAS 88.5 GA Atlanta, pr, rare 80
0830 WKPT 98.5 TN Kingsport, nx	2015 WXBK 102.7 FL Milton, ad 310
1030 WLOS 99.9 NC Asheville, nx	2018 WPEZ 107.9 GA Macon, m 130
1200 WDEM 105.3 GA Macon, ID	2240 WKRG 99.9 AL Mobile, ad 300
1/19 tr	2245 WFSU 91.5 FL Tallahassee, c 300
1015 WKIK 96.1 NC Shelby, mr	2/5 tr
1330 KSSN 95.7 AR Little Rock, nx	0824 WAMZ 97.5 KY Louisville, k 210
1405 KISR 93.7 AR Fort Smith, a	0830 WIZO 100.1 TN Franklin, m 75
1/20 tr	1035 WGCC 95.1 KY Glasgow, k 130
1100 WLTE 102.5 GA Waycross, ID	1100 WCRQ 92.7 AL Arab, r 50
1520 KTMO 98.9 MO Kennett, farm nx	2/8 tr
1/27 tr	0810 WKQQ 98.1 KY Lexington, ad 210
0915 WHYY 101.9 AL Montgomery, ad 180	0853 WELP 103.9 SC Easley, k 170
0925 WBBQ 104.3 GA Augusta, P. Harvey nx 150	0858 WBFM 98.1 SC Seneca, g 160
0935 WKPT 98.5 TN Kingsport, ad 100	2/9 tr
1/28 tr	1134 WTVY 95.5 AL Dothan, k 275
1819 WSTO 96.1 KY Owensboro, P. Harvey nx	1156 WROQ 95.1 NC Charlotte, ad 260
1/30 tr	2/15 tr
1420 WARM 102.3 TN Carthage, k 90	0943 WDEM 105.3 GA Macon, ad 130
1432 WIRJ 102.3 TN Humboldt, k, #1678 145	0950 WGBG 103.9 GA Greensboro, ad 70
2/3 tr	2/18 tr
2005 WITZ 104.7 IN Jasper, nx 230	1030 WLET 106.1 GA Toccoa, wx 140
2025 WKY 104.1 IN Evansville, m 220	

Total Chickamauga log: 666/375 via E-skip, total overall log 1680. The total overall log covers all stations in from Chicago, Louisville, Atlanta and other places. As you can see I do like to travel. I have also changed my mileage figures; I had been using a road atlas for mileage figures until this month. Now I use mileage figures from other DXers. I hope to have another great DX Season this spring & summer. Remember in '82 DX will come thru!

Report your FM DX to this column if you're from: AL, AR, AZ, CA, CO, DE, FL, GA, KS, KY, LA, MD, MS, NC, NM, NV, OK, SC, TN, TX, UT, VA & WV. Happy DXing!



Studios in Manahawkin & Toms River, New Jersey



P.O. BOX 17365
NASHVILLE, TENNESSEE 37217

KISS 99.9 FM



441 STUART STREET, BOSTON, MA 02116

--Logos from: Ernest R. Cooper, Provincetown, MA

NORTHERN FM-DX

Ralph Strobel, editor
2300 E. McGalliard Rd.
Muncie, Indiana 47303
Deadline: the 5th

April 1982

For FM DXers in Canada, the Northwest-Central states of WA OR ID MT WY ND SD NE MN IA MO and states east of the Mississippi River and north of the Mason-Dixon Line.

A FEW DAYS OF GOOD FEBRUARY TROPO REPORTED

David J. Nieman - 12284 Nice Rd. RR 3 - Akron, NY 14001
Equipment is the same with repaired C/M Stereo Probe 9 at 30 feet now.

1/26 tr	1500 WCDR* 90.3 OH Cedarville, g	355	2/15 tr	0900 WVNP* 89.9 WV Wheeling, c	225
1/27 GW			2/16 GW		
1201 WJSL* 90.3 NY Houghton, g	45	0145 CFMU* 93.3 ON Hamilton, pr	70		
1/28 tr		2/17 GW			
0300 WRKE 94.3 PA Cresson, r, "Q-94"	185	0015 WBSU* 88.3 NY St. Bonaventure,			
(*ID on tape)		(Now 100 watts w/T Rock in \$)			
		The Best of DX, Dave			

John Ebeling - 9209 Vincent Ave. S. - Bloomington, MN 55431

Very little DX from this area. Haven't had any Au of any consequence, either. I do not like the earlier deadline imposed on the editors. Seems as if the VUD is no earlier than before. All of the below at Bloomington, MN location. Spending a few days in AZ at end of Feb., and from the looks of it, sure won't miss any DX!!

2/2 tr 2200 WBWA 105.9 WI Bayfield, new \$ station (Not Washburn, WI?-RS)
2/13 tr 2108 KQAL 89.5 MN Winona, ID during basketball game
2/17 tr 2000 KJJK 96.5 MN Fergus Falls, \$

Regards, John

Richard Reese - 421 Marion St. - Jersey Shore, PA 17740

Equipment: Panasonic RF-1150, temporary use of GE Superadio since 2/22. All are new.

2/6 tr	0515 WPJS 106.7 SC Orangeburg, ID	575	2/7 tr	2120 WFMT 98.7 IL Chicago, c	555
2/7 tr			2/13 tr		
2000 WJJP 93.5 IL Joliet, ID	570	1232 WFBE 95.1 MI Flint, nx	360		
2015 WAKW 95.3 OH Cincinnati, ID, g	410	2/15 tr			
2030 WWC 105.7 IL Peoria, ID	655	1737 WYTD 96.1 NC Raleigh, ID	390		
2045 WTHI 99.9 IN Terre Haute, ID, m	550	2/22 Au			
2055 WXT 93.1 IL Chicago, ID, r	555	1720-1725 Unids on many freqs., many			
2101 WMCB 95.9 IN Michigan City, nx	500	French; 2035 more Unids, many apparently			
2106 WLS 94.7 IL Chicago, ID, r	555	same as in the first time.			
2110 WGOI 107.5 IL Chicago, ID	555	2/25 tr			
2113 WJZQ 95.1 WI Kenosha, ID	565	1630 WLUM 102.1 WI Milwaukee, ID, s	570		
2115 WMET 95.5 IL Chicago, ID, r	555	2/27 tr			
2117 WFI 103.5 IL Chicago, r	555	1745 unID 100.1 ?? Louisville Cards net.			
2118 WLOO 100.3 IL Chicago, m	555	1801 WVEZ 106.9 KY Louisville, ID	500		
2119 WOJO 105.1 IL Evanston, SS	555	1806 unID 94.3 ?? Jenkins?, talk of VA			
2119 WIAK 93.9 IL Chicago, m	555	1812 WHOP 98.7 KY Hopkinsville, tom	630		

Some excellent tropo in February came as quite a surprise. It was better than anything heard before. I wish it could be like this every year. I am temporarily using my brothers Superadio since my RF-1150 is out for repairs. I expect it back sometime during the second week in March. I hope it comes out better than ever. FM log totals now stand at 892. 37+ US, 5 Canada, & 2 foreign. 73's, Rich

FM/ESV

Mailing Address:
ILLINOIS WESLEYAN UNIVERSITY
P.O. Box 2900
Bloomington, Ill. 61701

Studios Located:
1207 N. Main St.
Bloomington, Ill. 61701

NORTHERN FM DX

APRIL 1982

Bob Zent - 1835 Fruit St. - Huntington, IN 46750

1/31 tr	1905 WSYX 106.3 OH London, g, local weather	125
	2159 WJMM 106.3 KY Versailles, g, "You're in touch with WJMM Versailles"	210
	2206 WSAK 106.3 IL Sullivan-Arthur, local ads	200
	2321 WNDY 106.3 IN Crawfordsville, d, promo for "Good Morning Crawfordsville."	97
	2354 WLNK 106.3 IL Lansing, g, call letters	118
	(Local WKSX 106.3 IN Columbia City, off the air this evening)	
2/1 tr	2228 WCLT 100.3 OH Newark, "T-100, Newark"	170
2/8 tr	2100 WNIN 88.3 IN Evansville, c, new station	240

Ralph Strobel - 2300 E. McGalliard Rd. - Muncie, IN 47303

2/25 tr 2200 unID 89.9 ?? Called what sounded like "Radio Wargi," KTOA or KPOA? Non-stop polkas; Anyone know what this is? PTA: MN
3/6 tr 0029 WRDL 88.9 OH Ashland, pr\$, "Music of the 80's," good IDs, wx 150

Bob Zent phoned me tonight in regard to WRDL. I had been looking for this station and finally heard it. This makes #170 from OH. WRDL was formerly on 89.5 MHz with 10 watts. Never heard it here at 10 watts. WRDL's 88.9 s/off was at 0200. Muncie's pirate, WELI, broadcast the following announcements which I taped: "If you have any questions, comments, QSL reports, album requests, or if you want to bring some albums in, go to our SCA channel at 67 KHz FM. This is WELI; we never play commercials." Later: "We're doing transmitter testing and adjustment, main channel frequency 89.0 MHz FM effective radiated power of 100 milliwatts with a directional horizontally polarized antenna." I think the DJ meant 1000 milliwatts, not 100. 1000 milliwatts would equal 1 watt which I believe the power to be. 100 milliwatts would only be 1/10 of a watt. Am I correct on this? 73, Ralph

COME TO WTFDA's
1982 CONVENTION
STATEN ISLAND, NY
JULY 30th - AUG. 1st
(watch for details!)

EASTERN TV-DX

William J. Draeb
Ellis St. R.R.#2
Kewaunee, WI
54216

Deadline: 1st

April 1982

George Rogers; 320 Lafayette Road, Chickamauga, GA 30707 EDT

January 1982	January 1982	February 1982
27 Tr 0845 WVIM-13 AL 145	29 F2 1025 BBC-1 41.50	4 Tr 2110 WVUE-8 LA 480
0847 WHMA-40 AL 110	30 Es 1330 TR-5 Cuba 900	2130 WTLZ-38 GA 224
Es 1912 KTVK-3 AZ 1774		2135 WDAM-7 MS 382
Phoenix(G/WRCB)		2158 WMAW-14 MS 295
28 Tr 1445 WMBB-13 FL 370	3 F2 1305 TVF-1 41.25	2220 WBIQ-10 AL 145
WSFA-12 AL 218	BBC-1 41.50	2235 WERC-6 AL "
(local off)		2935 WALA-10 AL 385
29 Tr 0827 WTVK-26 TN 111	4 Tr 1835 WALA-10 AL 385	0955 WDAM-7 MS 382
0830 WATL-36 GA 113	1900 WMAH-19 MS 464	1005 WETV-30 GA 113
F2 1025 TVF-1 41.25	2005 WHMA-40 AL 110	WTLZ-38 GA 224
	WEMG-42 AL 145	WANX-46 GA 113
		1010 WATL-36 GA "

Equipment: RCA 12" portable Model No. AFR-246 W. "Total stations to date 520. I hope to reach at least the 550 mark for the up coming DX season. I'm also still collecting various TV Guide editions from around the U.S.A. and Canada for my logo mural. Remember, in 82 DX will come thru!"

Rich Turcsany; 4 Charlesgate East, Boston, MA 02215 EST

11/2 Tr 1300 WSTG-64 Providence, RI testing w/ID slide, 5000kw arp.
11/4 Tr 2300 WHCT-18, WATR-20, WLIW-21, WVIT-30, WNJU-47, WEDW-49, WSNL-67 all in. 2315 WMTW-8, WCHB-10, WGAN-13.
11/9 F2 1000 E-2 video in on 48.24/.25/.26 mhz, no picture on European TV due to qrm from nearby Prudential Center.
11/29 F2 0930 (At Shelton, CT) - ccl on E-2 to E-4 stations in, visible on TV. 0940 Unid E-2 seen on European TV. Smear picture, vertical blanking bar, flickering horizontal field (looks like what happens when picking up Cuba ch.5). Set has PAL 625 line lock, but there are no E-2 stations in Europe using the SECAM system. Africa??

"The F2 on 11/29 was probably the best chance for me of picking up channel E-2 reception in Cycle 21. It also was a mystery, as I have found that there are no E-2 stations using SECAM in Europe. The only possibility for the unid would be Africa, probably Nigeria. Not much to report as far as regular DX goes--- the only highlight is the new WSTG-64 Providence, scheduled to begin programming on a regular basis (incl. STAR-TV STV service) in March. Their program tests have consisted only of Three Stooges cartoons weekdays from 6-7p.m. WGTN-66 is not on yet. I am soon going to buy an MDS converter to receive microwave programming in the Boston area before the courts make it illegal (like STV decoders). I've recently checked out a used magazine store and found some old issues of Radio-Craft (now Radio Electronics). The issues feature ads for television reception kits, as well as info on domestic shortwave stations from the 30s and 40s. It's not official yet, but I may soon be moving to Fairfield, CT from Shelton. The DX is not as good there, so I plan to get an outdoor antenna system. I will let you know next month for sure what will happen. 73's"

Steve West; 432 Kenmore Road, Havertown, MD 19083 EST-EDT

"After 'roughing it' without the VUD for a year, it's good to be a member again. The January issue was thin but there's a lot of information in it.

Not much DX last Spring. The October DX was hard to believe. South Carolina was in for hours with steady northern type DX signals. I suppose the 10-31 duct from Alabama was a one way duct? (I doubt it-wd).

DXers with locals on TV & FM may reduce the interference by this method. Attach a pair of "clicker" rabbit ears to the TV or FM set and put the outdoor antenna leads to the tips of the un-extended rabbit ears. Turn the clicker to change impedance. I have good results from the Radio Shack FM ears. Sometimes it helps shorting the ears to the phasing loop.

Equipment here is 7' Finco dish, AC-4990 amp on chimney at 35', Probe 9 and VHF log in pine tree at 35'. Sets are Zenith 19" B&W, Mitsuaba 3700S 13" color, AR-15 stereo receiver. I plan to attend the convention this year."

Eastern TV-DX

June 1981

Sat. Tr 0730 WGGT-48 NC Greensboro

August 1981

21 Tr 2300 WCTI-12 NC
22 Tr 0900 WRTS-49 SC Spartanburg
WRET-36 NC

October 1981

14 Tr 2330 PBS-19; Bridgeton xltr, s/off 12 midnite (thanks to call from Jim Alexander)
15 Tr 0730 WKFT-40 NC Fayetteville
WPDE-15 SC Florence

Steve West; continued---

October 1981

15 Tr 0730 WNOK-19 SC 0740 Unided-33; color bars; VT? LA?
1100 WHMC-23 SC over WNJS.
22 Tr 0800 WKFT-40 NC WPDE-15 SC WJPM-33 SC
31 Tr 0900-1900 WRET-36 NC WKFT-40 NC
2000 WLYJ-46 WV Clarksburg
WPTT-22 PA WPGH-53 PA
2300 WKPT-19 t

December 1981

28 Tr 2030 WPDE-15 SC

April 1982

December 1981

28 Tr 2030 WPTF-28 NC WITN-7 NC WCTE-22 t 2100 WUNJ-39 NC

January 1982

1 Es 2000 KHAS-5 NE
4 Es 1200 KARK-4 AR
8 Es 0900 KJRH-2 OK KETS-2 AR
30 Southwest Philly 100.3 stereo soul WSMF says they're licensed to 100.5 for cable radio by FCC? Phone for them is 215-476-5850.

Richard Reeser; 421 Marion St., Jersey Shore, PA 17740 EST

November 1981

29 Es 1954 WPBT-2 FL 2015 KTBS-3 LA

December 1981

19 Tr 0830 WLEX-8 VA Ae 1815 Unideds 2-4
21 Es 1658 KUSD-2 SD 1659 KINT-3 IA 1700 KTIV-4 IA 1705 KXON-5 SD 1715 KAAL-6 MN 1729 WMT-2 IA (now KGAN)
1757 KTCA-2 MN
26 Es 0743 WBRZ-2 LA
31 Ms 0759 WESH-2 FL

January 1982

1 Es 1330 KPRC-2 TX 1630 WEAH-3 FL 1655 WMAB-2 MS 1700 WKRG-5 AL 1729 WWL-4 LA 1735 KATC-3 LA

January 1982

1 Es 1746 KTBS-3 LA 1757 KDFW-4 TX KXAS-5 TX 1802 KIII-3 TX 1812 KTVI-2 MO 1859 KQTV-2 MO KCMO-5 MO 1901 KYTV-3 MO WDAF-4 MO
3 Ms 1630 WTMO-2 IN 4 Es 1057 WESH-2 FL 1059 KETS-2 AR WREG-3 TN 1159 WLBZ-3 MS WDSU-6 LA 1207 WKRG-5 AL 1228 WBRZ-2 LA 1258 KOET-3 OK KJRH-2 OK
5 Tr 1230 WAPB-22 MD Annapolis (now often seen with new ant.)
7 Es 0717 KGAN-2 IA (was WMT)

January 1982

7 Es 0728 KMTV-3 NE 0758 KQTV-2 MO 0759 WDAF-4 MO 0825 KETS-2 AR 0829 KJRH-2 OK 0848 KTVY-4 OK 0852 WEAH-3 FL 0859 WDIQ-2 AL WWL-4 LA 0910 KXAS-5 TX 0928 KTAL-6 LA 0929 KCEN-6 TX 0958 WKRG-5 AL 1022 WBRZ-2 LA 1025 KATC-3 LA 1044 WPBT-2 FL 1045 Cuba-3 12 Es 1915 WMAB-2 MS 1929 WWL-4 LA 2059 WCIX-6 FL 2159 WTVJ-4 FL WPBT-2 FL

"Quite a bit of off season Es observed in January. No trope, due to unusually cold weather here. The Quadrantids shower produced quite a few bursts on 1/3. At least 80 bursts seen on ch.7. No I.D.'s made on highband, however.

As of mid December, I have been using a four bay bowtie for UHF instead of the loop. Only one new logging made with it. I hope there is quite an improvement seen with tropes this summer. 73's and may there be E-Skip on ch. 13 this summer." (That would be nice, but more of the low-band variety would satisfy me --wd)

William J. Draeb; Ellis St. R.R.#2, Kewaunee, WI 54216 CST

February 1982

3 Tr 1937 KINL-30 MO 432 6 Tr 2127 " " " 14 Tr 1622 " " " 15 Tr 1928 WCET-48 OH 400 WKSO-29 KY 538 18 Tr 2034 KINL-30 MO 432 19 Tr 1855 " " " 2009 WQEX-16 PA 480 WPTT-22 PA " WPGH-53 PA " WKLE-46 KY 406 2055 WPCB-40 PA 480

February 1982

22 Tr 0633 KINL-30 MO 432 2116 WCET-48 OH 400 2130 WPTT-22 PA 480 23 Tr 0745 KINL-30 MO 432 25 0744-0802 WLRB-26 off. 26 WLRB off most of the day. Tr 1739 WTJC-26 OH 368 1833 WCET-48 OH 400 1957 WKYT-27 KY 473 WTVQ-36 KY " WKLE-46 KY " WKY-32 KY 437

February 1982

27 Tr 0728 WPTT-22 PA 480 KINL-30 MO 432 WKYT-27 KY 473 WTVQ-36 KY " WKLE-46 KY " 2039 WCET-48 OH 400 WKIX-19 OH " 28 Tr 1221 KINL-30 MO 432

Correction from last month: WBAY-2 has two ch.8 xltres; I saw the one in Sheboygan. (more next month-wd.)

WESTERN TV-DX

April 1982

New _____ New Mode _____ Tentative - t Unidentified - unid

Not a thing to report from North Dakota this time. Fortunately, we have three fine reports from others, including one from the far, far west (or is it the far east?).

Ronald Purdue, Route #1, Box 224, Byron, MN 55920

CST

Equipment: RCA 1932 XL-100 Color, JC Penney 5" B&W Portable, Archer VU-120 with coax lead-in.

December 1981	3 tr 1422 WFTV 18 WI 237	15 tr 1816 WSAW 7 WI 155
	1502 WISN 12 WI 237	1821 WLEF 26 WI 170
24 Es 1530 WBRZ 2 LA 938	Es 1630 WDIQ 2 AL 928	1832 WABO 12 WI 178
1559 KPRC 2 TX 1005	1700 WESH 2 FL 1205	18 tr 2036 KRIN 32 IA 118
		20 tr 1239 KDIN 11 IA 178
		tr 1253 WHO 13 IA 178

January 1982

February 1982

3 tr 1420 WMTV 36 WI 237

Not much this January and February. The weather was JUST BAD for expected January tropo, just too cold all month plus a lot of snow! I figure the Winegard AC-9880 will go in either April 9th or 22nd. Yesterday, the 21st, I worked on the UHF tuner in the XL-100 on a clean-up job, but I need to work on it some more. The next report (hopefully) will get the AC-9880 installed. Until then, 73's and good DX, Ronald (thanks for the report, fm)

Jim Pizzi, P.O. Box 1778, Lovington, NM 88260

Log Total - 148

MST

January 1982

6 tr 1420 Austin 24 377	23 tr 2230 Dallas U's
27 tr 0815 KRIV 26 TX 515	(all very strong)
0820 Austin 24,36	2232 Austin 18,24,36
28 tr 2252 Dallas U's 368	2238 KLTS 24 LA 539
2348 Albuquerque U's	2255 KLAA 14 LA 662
29 tr 0100 WFAA 8 TX 368	2255 WAPT 16 MS 772
KTVT 11 TX 368	2314 KSLat12 LA, CBS
0106 Albu. 7,13 240	2327 K12FM 12 TX 184
ms 0109 unid 11 ene	(Alpine KMID-2 10w)
tr 0118 KVIJ 8 OK 265	(0015, CB,KMID off)
Es 1702 KEWO 2 JAL	24 tr 0018 KSAT 12 TX 380
1715 XHAF 4 NAY	0020 KTAB 32 TX 216
1730 XHGT 4 JAL	0023 KCTV 8 TX 196

February 1982

1 Es 1910 KEWO 2 JAL 825	14 tr 0146 Dallas 8,13,21,
(10KHz-KMID+ ID's)	27
2 Es 1635 KEW or KEWO t	0825 "" 21,27,33,39
(KEW net)	19 tr 0025 KAUZ 6 TX 282
1647 XHTRt 2 GRO	0059 KCTV 8 TX 196
(0 kHz to above)	0107 WFAA 8 TX 368
1728 unid 3	(20 kHz to KCTV)
(0 kHz to KENW)	0858 Dallas 21,27,
1728 unid 4	33 (ss),39 (700 Clb)
("Veinieta TV 4")	1859 KTVV 36 TX 377
1859 KEWO 2 JAL	22 tr 0800 K65CB 65 NM 123
6 tr 1202 KSWO 7 TX 289	
1230 Dallas U's 368	

Conditions have been good here and hopefully will get better. Es noted into Mexico - might have had more ID's except for the language barrier. Excellent tropo opening on 2-23 and 2-24. Nothing noted north or south of a heading to the east - very narrow. Was watching KVUE-24 in Austin and saw CCI. Moved antenna and thought PBS station was Wichita Falls, Texas. I got serious when KLTS-24 ID'd. KLAA-14 is listed as NBC, but noted with ABC programming and promos as ABC affiliate. No sign of other Mississippi U's (probably off). Signals were near snow free at times, and I took some pictures. Early morning on 2-24, Houston and Austin also at nearly snow-free. A lot of ms bursts noted on channel 7 while KVII-7 was in (weak). K12FM listed as 10 watts in TV Digest. Had poor audio, but video was near snow-free. Looking forward to some good spring tropo. Best of DX, Jim (very nice loggings, especially VHF translators, fm)

Western TV DX

April 1982

James J. Stiles, CFAO/NAFK, Box Su/LR ADP, FPO Seattle, Washington 98770
(Kadena AFB, Okinawa, Japan)

Equipment: Teknika 19" color, 3 element 6 meter beam as antenna

February 21, 1982 10:00 - 12:00 midnight JST

After 10:00 PM, several strong signals were observed on or near System M (U.S.) channel 2. Weaker signals were observed on ch. 3 and ch. 4. At 10:50, local commercials were heard, including one for Liverpool Motors (used cars) on ch. 2. At 11:00, there was an Australian news update (few minutes). I have been able to identify the station as a System B (Australia) channel 1 (57-62 MHz) outlet of the Australian Broadcasting Corp., but I don't know which one. The mode of propagation was TE.

After 11:00, Philippine station DYDY, channel 3, Cebu City was identified. Cebu City Music Festival was being telecast. Propagation was either Es or backscatter.

Because of the mix of TE and Es, as well as the different transmission systems, video signals were not useable, even when strong. Lack of synch and multipath distortion was added to the normal co-channel interference.

On Okinawa, all U.S. channels 2-6 are normally vacant since these frequencies are used for land mobile and FM broadcast, but with few actual stations active.

Several high-quality scanners with coverage including 50-200 MHz AM and FM are available. I am considering acquiring one to facilitate more easily identifying TE signals in the future. Also, several all-system color sets are available. This would help with the synch problems.

Current plans call for installing a full size all-channel (U.S.) TV antenna in a typhoon proof location, if possible. A VTR may be used to record DX when video is useable.

If anyone is interested, I could submit picture ID's of the local Okinawa stations as well as a brief description of the conditions here.

February 23, 1982 10:00 PM - Midnight

Strong but unreadable video signals observed from south on and near U.S. channel 2. Distortion was due to incompatible transmission mode and TE propagation.

On 6 meters weak AM signals were heard near 52 MHz from Australia.

After 11:15, Spanish audio was heard on channel 3 and 4, presumably from the Philippines. By 11:30, Chinese TV audio was heard within channel 2 and 3. Again, video signals were strong on channel 2, but unreadable. Propagation was either via Es or backscatter. At this time, and past midnight, a 50.070 MHz station, VS6SIX (Hong Kong) was heard calling - with no replies.

(welcome. very interesting. I am quite sure photos would be of interest. fm)



KTQV - 2 Billings
KXLF - TV 4 Butte
KRTV - 3 Great Falls
KPAX - TV 8 Missoula

2 KTVN
RENO

6 KIVI

KEBB-TV 5
GREAT FALLS, MONTANA

KTVS 3
STERLING
COLORADO

KCRA
3 TV

KEVN
TV 7 RAPID CITY
KVVV TV LEAD/DEADWOOD

kelo-land tv kelo-11 kplo-6 kdlo-3

3 kvia-tv

4 KXLY-TV

VHF UTILITY DX

Donald L. Blevins
1715 Earhart Road
Baltimore, MD 21221
phone 301-574-2714

VHF UTILITY DX

VHF UTILITY DX....This month features a detailed frequency listing of aircraft stations as submitted by Mr. Robert Schweitzer of East Brunswick, New Jersey. A list of this type is new to my feature, as in the past the equipment available for aircraft left a lot to be desired. Scanners of the type in use by public service DX'ers today very frequently have a very good aircraft band. Please keep in mind that these signals are very low powered (basically about 10 watts) and control towers generally contain the antenna sites for those stations. In flight air-traffic control stations are generally located on mountain tops. However they are still only 10 watts!

KEY

AC Approach Control CT Control Tower GC Ground Control
ATIS Automatic Terminal Information Service

Philadelphia International AC 126.6 CT 118.5 GC 121.9 AC 128.4
ATIS 133.4 GC 118.05 AC 125.4 122.95

North Philadelphia AC 123.8 ATIS 121.1 122.95 Bridgeport-Sikorsky Memorial CT

Mc Guire AFB CT 120.6 ATIS 110.6 GC 121.8 AC 126.95 CT 120.9 123.0

Camden-Burlington County AC 119.5 122.8 New Haven CT AC 126.95 CT 124.8
122.95

Mercer County NJ AC 123.8 ATIS 119.45 GC 121.9

Pitman NJ AC 126.6 122.8

Cross-Keys AC 126.6 122.8

Bridgeport NJ AC 126.6 122.8

Monmouth NJ 123.0

Colts Neck NJ 122.8

Trenton-Robinsville NJ 123.0

Buehl PA AC 123.8

NADC Warminster PA AC 123.8 126.2

NAS Willow Grove PA CT 119.3 AC 123.8 GC 121.8

Turner PA AC 123.8 122.8

Perkiomen Valley PA AC 123.8

Old Bridge NJ 122.8

Forrestal NJ private 122.8

Twin Pine NJ 122.8

Doylestown PA AC 123.8

Pennridge PA 122.8

Quakertown PA AC 118.2 123.8 122.8

Hackettstown NJ 122.8

Princeton NJ 122.8

Bridgeport-Sikorsky Memorial CT

AC 126.95 CT 120.9 123.0

New Haven CT AC 126.95 CT 124.8
122.95

Poconoc Mountains-Municipal PA

AC 124.5 122.8

Danbury Municipal CT CT 119.4
122.95

Republic NY AC 127.4 AC 118.4
AC 123.7 CT 118.8 AC 132.4
AC 134.35 ATIS 126.65

Waterbury-Oxford CT AC 120.75
122.8

FLIGHT SERVICE STATIONS

Millville NJ 122.1
Philadelphia PA 122.6
Teterboro NJ 122.1
New York NY 122.1
Windsor Locks CT 122.3
Poughkeepsie NY 122.4

TERMINAL RADAR SERVICE AREA

Allentown PA ATIS 110.2 118.2 119.65

FLIGHT WATCH STATION

Teterboro 122.0

RADIO AIDS TO NAVIGATION (VORTAC)

Corry NJ 113.4
McGuire NJ 110.6
Robbinsville NJ 113.8
Colts Neck NJ 115.4
Yardley PA 108.2
Solberg NJ 108.2
Allentown PA 117.5
Broadway NJ 114.2
Stillwater NJ 109.6
Sparta NJ 115.7
Teterboro NJ 108.4
Kennedy NY 115.9
La Guardia NY 113.1
Canarsi NY 112.3

Van Sant PA 122.8

Allentown-Queen City PA 122.8

Kupper NJ 122.7

Newark International Airport ATIS 115.7 AC 127.6 AC 126.7 CT 118.3
125.5 GC 121.6 AC 128.55 GC 121.8 GC 118.85

Somerset NJ 123.0

Solberg-Hunterton NJ 122.8

Morristown NJ CT 118.1 ATIS 124.5 GC 122.95

Essex County NJ CT 126.5 GC 121.9

Hanover NJ 122.8

Flanders NJ 123.0

Blairstown NJ 122.8

Stroudsburg-Pocono PA AC 119.65 122.8

Lincoln Park NJ 122.8

Aeroflex-Andover NJ 127.6

Teterboro NJ CT 119.5 ATIS 108.4 122.95 GC 121.9

Sussex NJ 122.7

Ridgefield NJ 122.8

Evers NY 122.8

Little Ferry NJ 122.8

Kennedy International Airport AC 127.4 AC 134.35 AC 123.7 AC 132.4 AC 126.8
AC 118.4 CT 119.1 ATIS 111.2 ATIS 115.4 122.95 AC 125.7 GC 135.05 GC 121.9
GC 121.65

La Guardia NY AC 120.8 CT 118.7 122.95 ATIS 113.1 AC 125.95

Flushing NY 122.8

Grumman-Bethpage NY (private) 121.3 122.95

Suburban NY 122.8

Long Island-MacArthur NY AC 120.05 AC 124.05 CT 119.3 122.95 AC 124.05
ATIS 128.45

Suffolk County NY 120.05 125.3 122.95

Westchester County NY AC 126.4 ATIS 166.6 CT 119.7 122.95

Peekskill NY 122.8

Warwick NY 122.8

East Hampton NY AC 132.35 AC 120.05 122.8

Peconic River NY (private) AC 120.05

Spadaro NY 122.8

BALTIMORE/WASHINGTON AREA NEWS MEDIA

WBAL #1 450.0875 WDMV 450.2125
WBAL #2 450.1125 WJLA 455.5500
WBAL #3 450.1875 WJZ #1 450.3875
WBAL #4 450.2125 WJZ #2 455.3875
WMAR 450.3125 WBAL Radio 455.6125
WCAO 450.5125 WCEM Radio 161.76
WFBR 166.25 WPOC Radio 455.05
Metro Traffic Control 463.85
Sunpapers 173.225 173.375

			Base	Mobile
T	R	152.39	152.27	157.53
A	A	152.405	152.285	157.545
D	D	152.420	152.300	157.56
X	I	152.435	152.315	157.575
I	O	152.45	152.330	157.590
			152.345	157.605
			152.360	157.620
			152.375	157.635

VHF UTILITY DX

ALL TIME EASTERN LOCAL

Hank Holbrook 7211 Chestnut Street Chevy Chase, MD 21221

11-7-81

1329 NMN 70 156.80 Chincoteague, VA USCG Eastern Shore Group

Thomas J. Yingling, Jr. 221 Pinewood Road Baltimore, MD 21221

1-18-82

1641 KGN 511 33.92 Westminster, MD Carroll County Fire Department
 2341 KUE 698 33.70 Eagleville, PA Montgomery County Fire Control

The following stations were received via a unknown Latin American Repeater whose input is 33.90 and output is 36.90. By simply programming 36.90 mhz in your scanner, a large portion of New England Fire Department were heard.

2-2-82

1640 KQA 216 33.90 Cleveland, OH Cleveland Fire Department
 1705 KGE 633 33.90 Harrisburg, PA Dauphin County Fire Control
 1705 KBZ 283 33.90 Guilford, NH Lakes Region Mutual Fire Aid Association

2-7-82

1108 KCB 979 33.90 Norwich, CT Norwich Fire Department
 1109 KEE 498 33.90 Windsor, NY West Windsor Fire Department
 1112 KGB 393 33.90 Wayne, PA Radnor Township Fire Department
 1120 KQI 316 33.90 Cincinnati, OH Hamilton County Emergency Communications
 1121 KGH 770 33.90 Lebanon, PA Lebanon County Fire Department
 1122 KKL 552 33.90 Fenton, NY Broome County Fire Control
 1130 KCA 585 33.90 Plymouth, MA Plymouth Fire Department
 1146 KDA 382 33.90 Greenville, MA Greenville Fire Department
 1156 KCA 661 33.90 Carver, MA Carver Fire Department
 1201 KCA 639 33.90 Wareham, MA Wareham Fire Department
 1201 KCK 671 33.90 Lake George, NY Warren County Fire Control

2-13-82

1205 KCL 540 33.90 Halifax, MA Halifax Fire Department
 1209 KEW 982 33.90 Port Dixon Village, NY Port Dixon Fire District
 1225 - - - 33.90 - - - - - Lawrence County Fire (any help guys?)
 1246 KVV 228 33.90 West Stafford, CT West Stafford Fire Department
 1619 KCC 350 33.90 East Bridgewater, MA East Bridgewater Fire Department
 1705 KCW 348 33.90 Fort Fairfield, ME Fort Fairfield Fire Department
 1706 KSK 423 33.90 Tilton, NH Tilton Fire Department

Donald L. Blevins 1715 Earhart Road Baltimore, MD 21221

2-12-82

1114 KCA 633 33.90 Middleboro, MA Middleboro Fire Department
 1119 KQI 316 33.90 Cincinnati, OH Hamilton County Emergency Communications
 1126 KCG 933 33.90 Norwell, MA Norwell Fire Department
 1140 KCA 585 33.90 Plymouth, MA Plymouth Fire Department
 1143 KBR 226 33.90 Martinsburg, WV Martinsburg Fire Department

2-14-82

0946 KBH 354 33.90 Rockville Centre, NY Rockville Centre Village Fire
 0948 KFC 851 33.90 Emigsville, PA Alert Fire Company
 1021 KCB 979 33.90 Norwich, CT Norwich Fire Department
 1054 KKV 431 33.90 Killingly, CT Quineburg Valley Emergency Communications
 1126 KGC 263 33.90 Colchester, CT Colchester, CT
 1200 KCA 639 33.90 Wareham, MA Wareham Fire Department

2-19-82

0941 KGB 393 33.90 Wayne, PA Radnor Township Fire Department
 0941 KCL 540 33.90 Halifax, MA Halifax Fire Department

2-26-82

0933 KCA 351 33.90 Duxbury, MA Duxbury Fire Department
 1016 KBZ 283 33.90 Guilford, NH Lakes Region Mutual Fire Aid Assoc
 1100 KAY 990 33.90 Groveport, OH Madison Township Fire Department

TECHNICAL TOPICS



Q: "I think I may have had auroral DX on TV recently. What does it look like on a TV channel?"

A: Video signals propagated via the auroral mode are very distinctive. In the words of one DXer, they are "unmistakably unrecognizable." An apt term commonly used by TV DXers to describe the look of auroral TV DX is "hash." Video signals propagated via aurora are extremely distorted, due to the fact that they're being reflected by a rapidly fluctuating "curtain" of ionized particles--sometimes visible to the naked eye in clear northern skies at night, under the proper conditions. The visual display of such an event, called an auroral borealis--more commonly referred to as the "northern lights"--resembles a shimmering "curtain." Obviously, it's a less-than-smooth reflector, to say the least, and signals are arriving via multiple paths, as well as changing in strength wildly up and down, making it practically impossible to view a video signal.



auroral "hash"

Q: "Can I modify my TV to receive auroral TV DX locked into sync? Would realigning the AGC help?"

A: Unfortunately, nothing you could do to the AGC circuit would probably be of any help, unlike the way that it would for meteor scatter DXing on TV. The video signals are garbled mostly because they are AM. Signals that are amplitude modulated suffer the most distortion in an auroral DX opening because the rapidly changing signal strength itself resembles a further kind of amplitude modulation to your tuner. Things would be a bit different if television broadcasting used FM as video modulation, and that's why your best chance for identification of an auroral TV DX station comes from the audio signal, which is FM, of course.

Q: "What does the audio sound like in auroral openings?"

A: On TV, you can hear a very distinctive dull roar on a clear channel. What your set is doing however, isn't giving you the TV sound carriers of auroral DX stations. Conventional TV sets use the intercarrier method to receive TV audio, rather than completely independent detectors for video and audio. This means that any sound you're hearing depends almost totally on the kind of picture you're receiving. Unfortunately, the wildly distorted video means that in an auroral opening, the audio will be unusable. What you hear is the "roaring" of the video carriers themselves. You can get around this by using a good sensitive TV audio-only receiver. There are a few models on the market for audio component enthusiasts, but they may not offer the best kind of DX performance. Look for one that would be roughly equivalent in performance to a good FM DX tuner. For that matter, if you want to hear auroral DX, you'll have a better chance DXing the FM band. There are more DX targets there, and most of them should prove to be easier to identify than a TV audio signal.

Q: "If there's a lot of auroral DX activity this spring, will it mean a good E-skip season will follow?"

A: It may be true that auroral activity sometimes induces E-skip activity, but the major part of the E-skip season does not seem to be determined by the spring auroral activity. Both "good" and "bad" E-skip seasons have been known to follow a spring that features above-average auroral sessions. However, watch for an increase of sudden-starting late-night E-skip openings that appear to come "out of nowhere" in the period of a day or two following a heavy auroral disturbance. Those kind of E-skip sessions are very much a result of the auroral event.

UNITED STATES DOMESTIC RADIO NETWORKING

Greg Monti

This article, with its accompanying chart, attempts to be the complete description of national radio networking in the U.S. Several items have been left out on purpose: state networks, sports networks, and the distinction between "Traditional" networks (who pay their affiliated stations "compensation" for carrying the network commercials) and so-called "network-type audio services" where the money flows in the opposite direction. The hard and fast rules in this area are blurring quickly. Notable by their absence are two of the "new" networks, Enterprise and Continental, both of which recently announced that they were going out of business. It may take quite a while, and quite a few additional economic failures, before the whole business of radio networking settles down from its current, euphoric state.

Here are explanations of what appear in the columns in the chart:
Column 1: This contains the name of the "main" network or multi-network business venture along with the name of its ultimate owner (if known) and its home base.

Column 2: Here, I've put a proposed, standard abbreviation for use by DXers. Due to the large number of "sub-networks" now in service, I settled on three or less letters for the main net, followed by two or less letters for the sub-net.

Column 3: Name of the sub-network, if there is one.

Column 4: A brief description of the target audience of this sub-network, if known.

Column 5: The format(s) of the radio stations on which this sub-network is intended to appear. These aren't carved in stone.

Column 6: The types of network programs fed by this sub-network. There are four types: (a) newscasts, (b) features (programs less than 15 minutes long which aren't newscasts), (c) "long-form" programming (stuff between 15 minutes and several hours in length such as "The Larry King Show" on MBS, "Meet the Press" on NBC, "Mystery Theater" on CBS and "Morning Edition" on NPR) and (d) "full-format" programming (in which the network supplies everything a station needs to conduct its broadcast day except for local commercials and station identification announcements).

Column 7: Interconnection. Virtually all the national networks have announced something between the planning and execution of a satellite delivery plan by now. However, I'll try to show the current operating condition as of mid-March, 1982. For those on satellite or planning to go that way, I've tried to give the satellite and transponder on which network service is carried. The "W" stands for Westar, "F" stands for RCA Satcom. There are at least three ways to distribute audio by satellite: (a) by single-channel-per-carrier analog FM, (b) by frequency-division multiplex, placing the radio signal as a subcarrier of an existing video transmission, and (c) by time-division multiplex, by breaking up the audio program into digital "bits" and combining them into one, massive, rapid bit stream which modulates a single RF carrier. The three digits after the abbreviation of the satellite owner indicate the satellite number and transponder number. For example, "W402D" is Westar IV, transponder 2D; "F324" is Satcom III, transponder 24. "L" stands for "landline", "S" for satellite.

1 Main Network Name (Owner & Home Base)	2 Abbreviation	3 Sub-network Name	4 Target Audience	5 Stn. For- mat	6 Network Program Types	7 Interconn- ection
ABC Radio Networks (American Broadcasting Companies, Inc., New York NY)	ABC/C	ABC Contem- porary	12-34	T40	a, b, c	L
	ABC/D	ABC Direction	25-44	POP	a, b, c	L
	ABC/E	ABC Entertain- ment	35-49	MOR C&W	a, b, c	L
	ABC/FM	ABC/FM	25-44	BFL CLA	a, b, c	L

ABC/I	ABC Information	25-54	NWS TLK	a, b, c	L
ABC/RR	ABC Rock Radio	18-34	AOR	a, b, c	L
ABC/SR	Superadio	18-49	POP	a, d	S W3__(c)
ABC/TR	Talkradio	25-54	TLK	d	S W3__(c)
APR	Associated Press Radio Network	12+	all	a, b, c	S W301(a)
APR/MC	Music Country Network	25-54	C&W	c	S W301(a)
BBM)	Bonneville Beautiful Music	35-64	BFL	d	S F303
CBS	CBS Radio Network	25+	all	a, b, c	L
CBS/RR	RadioRadio	18-34	AOR	a, b, c	L
CNN/R	Cable News Net- work/Radio	25-54	NWS	d	S F3__(b)
DJR	Dow Jones Radio	25-54	NWS TLK MOR	a, b	S W404D(c) S W301(c)
FR	Family Radio	25+	GOS REL	d	S W404D(c)
MBS	Mutual Radio	25+	all	a, b, c	S W402D(a)
MUZ	Muzak	25+	sca*	d	S W402D(a)
NBC	NBC Radio Network	25-54	all	a, b, c	L
NBC/S	The Source	18-34	AOR	a, b, c	L
NBC/TN	Talknet	25-54	TLK MOR	c	L
NBN	National Black Network	blacks	SOL	a, b, c	L
NPR	National Public Radio	7+	all	a, b, c	S W402D(a)
PRN	Physicians Radio Network	doc- tors	sca*	d	L
RKO/1	RKO/1 Radio Network	18-34	POP	a, b, c	S W301(a)
RKO/2	RKO/2 Radio Network	25-49	MOR C&W	a, b, c	S W304(a)

Sheridan Broad- casting Co. (Arlington, VA)	SBN	Sheridan Broad- casting Network	blacks SOL GOS	a,b,c	S W402D(a)
Burkhardt & Abrams, WCCO et al (Mokena, IL)	SMN/CC	Satellite Music Network/Country Coast to Coast	25-49 C&W	d	S F303(b)
	SMN/SS	StarStation	25-49 POP	d	S F303(b)
	SMN/TM	Traditional MOR	35-64 MOR	d	S F303(b)
	SMN/UC	Urban Contem- porary	18-34 SOL T40	d	S F303(b)
Sunbelt Broad- casting Co. (Colorado Springs)	TRA	Transtar/Music Connection	25-34 POP	d	S W404D(a)
United Press International (Scripps- Howard News- Papers, New York)	UPI	UPI Audio Net- work	25+ all	a,b,c	S W301(a)
United Stations (New York)	USN	United Stations Country Music Network	25-49 C&W	d	S W503D(a)

*sca stands for subsidiary communications authorization, usually a 67 kHz subcarrier on an FM broadcast station, offered usually by subscription to a special-interest audience.

Note: There's a satellite shuffle in progress as I write. Westar I is to be replaced by Westar IV in April 1982. Westar V replaces Westar II in the fall. Networks will use the same frequencies and transponders on both the old and replacement satellites. The nomenclature for the new satellites has been used here.

Comments and corrections are welcomed. Mention in your next report to this club or to Greg Monti, 1110 Fidler Lane #1424, Silver Spring, MD 20910.



NEXT MONTH in the VHF-UHF Digest

the official publication of the
Worldwide TV-FM DX Association

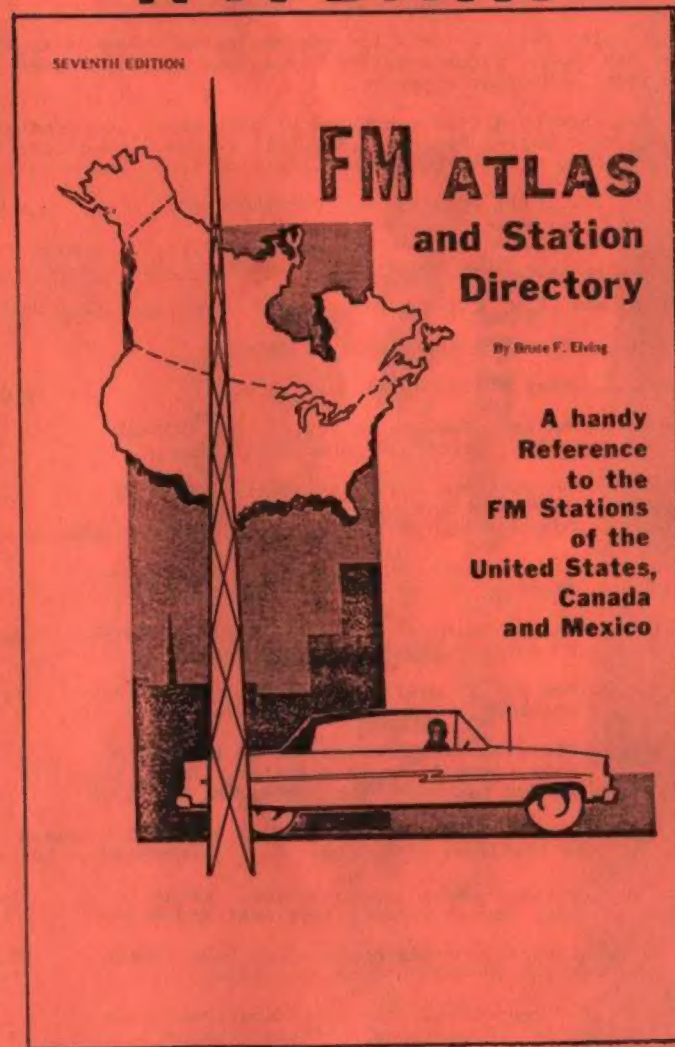
INFORMATION ON WTFDA's 1982
CONVENTION TO BE HELD ON
STATEN ISLAND--YOU'LL
LOVE NEW YORK!

THE E-SKIP SEASON IS HERE!
GET READY.

AN ANNIVERSARY FOR THE
VHF-UHF DIGEST.

PHOTO-NEWS IS BACK!

AVAILABLE FROM WTFDA!!!



\$7.45

FM DXers--it's almost time for the E-skip season! Get your latest copy of Dr. Bruce Elving's FM ATLAS now. When used together with the VUD's FCC FM monthly column, this superb publication keeps you up-to-date. Complete with maps showing station locations. Order today from WTFDA. Also available directly from "FM Atlas," 4515 Avenue "B," Kearney, NE 68847, U.S.A.